

Single User

User Guide



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Convert To	197
Mail To	197
Copy To	197
Copy Assets Assigned to Category To	197
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The Cumulus® Digital Asset Management System provides powerful tools for archiving, managing and marketing your digital files. Cumulus can store any type of digital media assets, including all types of documents, images, audio, video, layouts from publishing programs, presentations, and PDF files. Once assets are stored, Cumulus becomes a central media repository from which you can view, locate, search, organize, copy, move, categorize, and otherwise manipulate the cataloged assets. Once you've settled on a process for storing and retrieving your digital assets that works for you, the process can be automated, further enhancing the efficiency of your workflows.

Intro

Canto Cumulus Single User

Canto offers different editions of Cumulus. Canto Single User is the perfect standalone central media repository to efficiently catalog, organize and reuse any type of digital file.

This guide covers the functionality of the Canto Cumulus Single User Edition. How to install Canto Cumulus Single User is described in a separate *Installation Guide*.

- Special functions Learn the basics of working with the Cumulus URL Asset-Store Module and find out how Cumulus supports MS Office documents or RAW Images. (See "Specialized Usage chapter, starting on page 85.)
- Catalog management Describes how catalogs manage the media assets stored on your system, how to define the properties of individual catalogs and how to maintain the catalog files (copy, compress, back up, divide, merge, etc.). (See "Managing Catalogs" chapter, starting on page 141.)

Cross-Platform Issues

Cumulus is a cross-platform application, meaning that it runs on Windows® and Mac® OS X (Macintosh®) systems. Though the program's features are identical in each version, portions of the user interface differ due to operating system or keyboard conventions. These differences are denoted or explained when necessary and assumed otherwise (e.g., the difference between "maximizing" a window in Windows, and "zooming" a window in the Mac OS X is not explained).

- This icon denotes what pertains to Mac OS X only.
- This icon denotes what pertains to Windows only.

User Interface Item Conventions

To differentiate user interface items – buttons, menus, text fields, etc. – from surrounding text, those items are displayed in **bold**. For example:

"Click the **Open** button."

To differentiate menu hierarchies, the > character is used. For example:

"Select File > Open to open a file."

This example means to select the **Open** item from the **File** menu.



Understanding Cumulus

To get started with Cumulus, you need to understand only a few basic concepts. Cumulus creates special files called *catalogs*, which Cumulus uses to keep track of your valuable *assets*. As you catalog your assets, Cumulus creates special catalog entries called *records* that represent the assets to be managed. Each record contains vital searchable information about the asset it represents. To make searching and retrieving records easier, Cumulus lets you organize and classify records into logical groups called *categories*. Any individual set of records comprises a *collection*. A collection is a way of looking at catalog(s).

Assets



An asset in Cumulus is simply any one cataloged file or data stream. A video clip, an audio clip, an image, or a page layout document are examples of files that are commonly cataloged in Cumulus. But the word *file* suggests an asset that is stored on a digital medium like a hard-disk or CD-ROM. What if the asset is a

record in a database? This is not a file per se, but as far as Cumulus is concerned, it is a data stream that can be cataloged, kept track of and accessed.

Catalogs



Like a filing cabinet, Cumulus catalogs serve as storage locations for asset collections. You can have as many catalogs as you like. Catalogs are cross-platform compatible, so it doesn't matter what type of computer is used to create a catalog. For more information, see "Catalogs".

Collections



Collections are like snapshots from your open catalog(s). When you work with your assets in Cumulus, you're viewing a constantly changing group of records. Without collections, each view of this group would be lost as soon as it is was changed. Collections, however, enable you to capture any particular set of records and save it as you see it - all without disrupting your workflow. Once you see something you like or could use again, save it as a collection and recall it whenever you need it. You can even send your collection as an attachment to an e-mail message in one easy step.

A collection also acts as your temporary workspace in Cumulus, meaning that changes made to your collections do not affect the content of your catalogs. Even deleting a record from a collection does not remove it from the catalog (unless you really want it to, which you can do, too). For more information, see "Collections".

Categories



Like folders in a filing cabinet, Cumulus categories serve to organize assets (files). But here the similarities end. Assets can appear in any number of Cumulus categories at the sametime. For more information, see "Categories".

Records



Records represent assets. Each record represents one asset. Records hold information on the asset, such as file size, type, location, creation date, and much more. Cumulus allows the creation of customizable record fields, which can contain almost any sort of information you desire. Since these user-defined record fields are also fully searchable, you can tailor Cumulus to fit your requirements. It's very important to draw the distinction between records and assets. Records are part of Cumulus catalogs; assets are not. Records represent assets. For more information, see "Assets/Records".

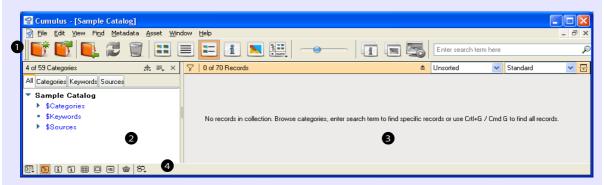


In order to exploit the potential of Cumulus fully, it's necessary to proceed from a strong foundation. It's a good idea to know the meaning and capabilities of the features you're using in Cumulus and how they're related. This section contains an overview of the Cumulus interface and describes the basic components of Cumulus in more detail – catalogs, collections, records, and categories.

Explore Cumulus

Overview: The Cumulus User Interface

The Cumulus main window, your workspace, is the Collection window. It provides two main panes, the Category pane and the Record pane. Additional panes, e.g. the Info pane, can be activated.



- Main Toolbar provides icons for some of the most popular functions and for modifying the workspace. For details refer to the tooltips that appear when hovering with the mouse over an icon.
- 2 Category Pane displays categories. Each Cumulus catalog is represented by a main category which has by default three subcategories. These correlate with the Category Tabs.

The top bar of the Category pane indicates the total number of categories in all open catalogs, the number of currently visible categories and the number of selected ones (if any).

Additionally, the Category pane top bar contains three icons:

indicates the active category search options; opens the Search & Sort preferences

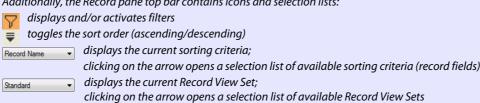
opens a menu to change the Category View Set

closes the Category pane

3 Record Pane – displays the records of cataloged assets..

The top bar of the Record pane indicates the total number of records in all open catalogs, the number of currently visible records and the number of selected ones (if any).

Additionally, the Record pane top bar contains icons and selection lists:



Status Bar – contains icons for toggling the display of additional panes and one icon to change the order of the left

side panes:

pens a menu to mange the workspace

ightharpoonup hides/shows the Category pane

shows/hides the Information pane (providing further information on the selected record)

opens/closes a subpane of the Record pane (for more information, see page 80.)

shows/hides the Category Information pane (providing information to the selected category)

shows/hides the Thumbnail pane

shows/hides the Preview pane

shows/hides the Calendar pane

All panes listed above are displayed on the left side of the Record pane.

shows/hides the Collection Basket pane on the right side of the Record pane

popens a dialog to rearrange the order in which the panes on the left side are displayed.

Catalogs

A Cumulus catalog is a group of records that, together, represent the assets you want to manage. Each asset is represented by one record. There is no limit to the number of different media file formats that can be represented in one catalog. One of the greatest features of Cumulus is its ability to catalog any digital asset, in addition to the file formats directly supported.

A catalog has a database file at its core. The way you work with the information in this file can be extensively customized.

When you catalog assets, the catalog settings determine how and what sort of information Cumulus extracts, creates and stores on the assets as metadata in the record fields and category fields.

Each catalog can have its own distinct properties. Any changes made to the catalog settings affect the way information is stored on all of that catalog's assets. To set up a catalog to store information in addition to or differently from the default settings, fields can be added to the catalog either by activating them from the list of fields that Cumulus supports or by defining your own custom fields.

Catalog Size and Performance

As catalogs increase in size, so do the requirements they place on computer hardware. It takes more processing power to work with 200,000 records than it does with 200. It also takes more RAM to hold the larger catalog in memory.

NOTE: The unique way Cumulus searches for records prevents large catalogs from slowing down the search speed.

There is virtually no limit to the size of a catalog file (up to 1 TB). Most users will find it best to split catalogs for organizational and performance reasons. The actual number of records that can be stored in a catalog and the catalog's actual file size is determined by the size of each record. (See "Record Size," p. 21.)

Catalog Scope

Catalogs can include records for as many different asset types as you like. But you may find it best to have different asset formats cataloged independently. For example, it might not make sense to have your image assets in the same catalog as your audio clips, though it is possible.

On the other hand, don't limit the scope of each catalog too much. For example, when you're looking for an image to use on a Web page, do you care if it's in GIF or JPEG format? Separating similar asset types by specific file format can be inconvenient when searching. Cumulus cannot search through catalogs that aren't open. If each of your image file formats has its own catalog, they'll all have to be open if you want to search through all of them. Remember, you can use Cumulus' categories or built-in information fields to find files based on format, projects in which they were used, or status, for example.

Things You Can Do with Catalogs

- Backup. (See "Backing Up Catalogs," p. 163.)
- Change catalog setting.
 (See "Catalog Settings," p. 142.)
- Compress. (See "Compressing Catalogs," p. 162.)
- Copy a catalog. (See "Copying Catalogs," p. 164.)
- Create a new catalog. (See "Creating Catalogs," p. 159.)
- **Delete** a catalog. (See "Deleting Catalogs," p. 164.)

- Divide a catalog into smaller catalogs. (See "Dividing Catalogs," p. 165.)
- Open an existing catalog. (See "Open Catalog," p. 170.)
- Rename a catalog. (See "Renaming Catalogs," p. 164.)
- Repair a damaged catalog. (See "Repairing Catalogs," p. 164.)
- Search through a catalog. (See "Searching," p. 32.)
- **Set** the catalog's properties as defaults. (See "Repairing Catalogs," p. 164.)
- Update catalogs from earlier Cumulus versions. (See "Migrating Catalogs," p. 165.)

Adding Assets to Catalogs

The term *cataloging* describes the process of importing and storing information about your digital assets. This information, called *metadata*, is the data associated with a digital asset beyond the actual file data itself. So, while the words you type in a Microsoft Word file constitute the file's *data*, the file's name, size, location, author, creation date etc. are examples of the file's *metadata*.

Some metadata is added to assets automatically by the software used to create or edit the asset. This is the case with the most common file metadata, such as size and modification date. But, depending on the creating software (or hardware), additional metadata can be embedded, too. This is the case with digital cameras that embed photo shoot dates, camera type, lens aperture and shutter speed, and even the GPS coordinates of the shot location into the files.

Additional metadata can be added after the asset has been cataloged. An asset's metadata serves as the basis for how you find the asset, so it's important that your DAM system enables you to create as much metadata as you need. For example, if you need to find photographs based on the photographer's name, you want to make sure photographer names are included in the metadata stored for your photograph assets. If you need to find a Microsoft Word file that includes a certain text phrase, is associated with a given fiscal year's revenue, and edited within the last month, the proper metadata enables that too. A complete DAM solution like Cumulus can also enable you to automatically find all images used in that document, and even find the PDFs that were later generated from it. With regard to file formats, Cumulus can catalog any type of digital asset and offers enhanced support for the most popular formats. The term "enhanced support" means different things, depending on the file format in question. For example, Cumulus offers enhanced support for Adobe® InDesign® and QuarkXPress® files by enabling you to preview individual layout pages right from within Cumulus. Enhanced support for Microsoft® PowerPoint files enables you to actually generate new PowerPoint presentations—right from within Cumulus using assets and PowerPoint slides cataloged in Cumulus. Enhanced support for Microsoft® Word, Excel, Illustrator and PDF files includes extracting text that's included inside the files and making it searchable catalog metadata. So, not only can you find the files in Cumulus based on *metadata*—file name, modification date, production status, etc.—you can also find some files based on their actual contents.

When you catalog digital assets, Cumulus performs a number of behind-thescenes tasks in order to generate an asset record that best represents the asset. It's easiest to think of these tasks as a series of steps through which the asset flows during the cataloging process. They are:

- Filters
- Metadata Extraction
- Field Linking
- Metadata Templates

- Central Asset Storage Options
- Asset Handling Sets

Filters

Filters provide "knowledge" of a given asset type to Cumulus. They are, in fact, what enables the program to offer enhanced metadata support for so many file formats. For example, the JPEG filter knows to parse incoming JPEG assets for information common to that file type, such as horizontal and vertical dimensions (and much more). The MP3 filter extracts audio-related metadata, such as length and sample rate. Filters are like plug-ins—they can be added, activated and deactivated at any time. The Cumulus SDK (software development kit) enables others to create custom filters

Metadata Extraction

As mentioned, all file formats include at least a basic set of metadata that Cumulus captures during the cataloging process. For many file formats, this core information is the only metadata captured during cataloging. Some formats, however, store extensive metadata right "inside" the file itself through the use of metadata standards called XMP, IPTC and EXIF. Popular formats that support one or more of these standards include JPEG, PDF and TIFF.

Many applications enable users to "stuff" metadata directly into files using these standards. During the cataloging process, Cumulus copies this data into the asset record, making it easily searchable. (Cumulus can also write data back into some "metadata fat" file formats.)

Metadata can also come from sources other than assets, such as databases or financial systems. Cumulus enables you to import metadata originating from sources like these into your catalogs through a menu command. This offers a great way to synchronize your Cumulus catalogs with other systems, such as product databases or financial systems.

For example, say you have a database that contains details about each of your products—UPC codes, color options, sizes, etc.—and you use Cumulus to keep track of product photographs used for packaging, online sales and advertising. By importing the product data into Cumulus, you can perform the same searches for product images as you can for product information.

This is a workflow example already in use successfully at Cumulus installations now. One customer produces weekly fliers that showcase sale items. UPC codes for products to be featured are sent to the graphics department who then use Cumulus to find acceptable product images. This ensures the correct image is used for each product in the advertisements. (If you've ever seen a weekly mailer that describes one product, but shows another, you can understand the value of this workflow.)

Category trees can also be constructed based on imported data. This makes it easy to create an organizational structure that's familiar to your employees: just provide Cumulus with a text file that represents your current organization structure, and the category tree is created for you automatically. The import function can also make upgrading to Cumulus from other DAM systems much easier.

No matter what the origin, Cumulus stores all metadata in catalog fields. A default set of fields is provided with each newly created catalog, and you can also define any number or type of custom fields you need. Later, you'll read about the various field types available in Cumulus.

Field Linking

Cumulus can map and copy the metadata found inside your assets to appropriate fields inside your Cumulus catalogs. So, for example, the contents of the "Notes" field in the asset can be copied to the "Notes" field in the catalog.

You can also define field links of your own, in case you want to override default mappings, or create new ones. This is especially helpful when you want certain fields in your catalog to serve the same purpose for different asset types.

For example, say you work with video in both QuickTime and Windows Media formats. QuickTime includes a standard metadata field for video that's called "Writer." Windows Media, on the other hand, includes a field called "Author." You could have fields in your catalogs for both, but then you'd have to include both when searching for that information. A more convenient way to go about this would be to choose one of those field names for your Cumulus catalog and use field linking to map the contents of the other field to that field. That way Quick-Time "Writer" and Windows Media "Author" metadata are stored in the same catalog field, making searching a breeze.

Asset metadata fields can also be field-linked to generate Cumulus categories. This is handy if your assets contain metadata keywords that you want translated into Cumulus categories. Cumulus can even generate category trees that emulate the folder structure the asset was found in. If your current folder structures are based on hierarchies that enhance your workflow, this option offers a great way to get instant category trees that will be familiar to users.

Collections

A collection is Cumulus-speak for a set of records from any one catalog or even multiple catalogs. It is a way of looking at your catalog(s) – the way that you look at it at any given time. Whenever you work with assets in the record and category panes – which make up the Collection window – you're creating or modifying collections. When you view the records in any category, you're looking at a collection. When you view the results of a search, you're also looking at a collection. The same is true for individual records you've dragged and dropped into the window – any 'snapshot' of your catalog can comprise a collection. A collection acts as your temporary workspace in Cumulus, and you can also save it as a file.

While a collection can contain all records in a single catalog or all in a single category, it is neither one nor the other. A collection can also contain – and here is where its advantages become obvious – the results of a search (either as a new collection or replacement of the current collection), or any records you drag and drop into the Collection window. Any individual set comprises a collection. The records in one collection may even belong to different catalogs.

Once saved, a collection file remembers the records it contains and the Record View Set used. A collection file also keeps track of column width of the Details View.

Assume, for example, that you have a catalog containing thousands of records organized neatly into categories. Your latest project, however, only requires assets from four of those categories, and from those it only requires the image files. You could first run a search to pull all image files from those four categories. Then you could select a Record View Set and emphasize the exact information you need for this project. Save the collection, and from now on you can simply open the collection containing the records you really need – while the entire catalog remains available to you in the background. You could then e-mail the collection to in-house members of the project team.

A collection, whether saved or unsaved, is always connected to its catalog(s). When a collection is open, the catalog(s) storing the records of the collection are

also open. In order to open a particular collection, you must have access to its catalog(s). If a record is removed from a catalog, it is removed from any of the collections it was in. Similarly, if you delete a category, it is deleted not only from one collection, but also from the catalog.

You can, however, delete a record from the collection without deleting it from the catalog – as long as you press only the DEL key. But if you press both **Command** / **Control** and DEL, the record will be removed from both collection and catalog (see "Delete," p. 178, for more information).

Working with Collections

Collections can be customized and then saved, so that your particular preferences for a special set of records can be recalled. A collection file remembers the records it contains, the Record View Set used and the column width of the Details View.

As collections are such flexible and malleable creatures, it might be a good idea to save your special collection once you have configured it. This is because an unsaved collection with its specific configuration is not automatically saved when you close it. And as soon as your collection changes – which can happen quite often – any unsaved changes are lost. Saving a collection is easily done via File > Save Collection As. A dialog appears for you to choose the name and location for the collection file. Once a collection is saved, it is easy to open via File > Open Collection

When you create a new collection via File > New Collection, it can either be empty or contain the currently selected records. However, concerning the view, the new collection will be a copy of the active collection. In other words, the colors, fonts, and fields of the new collection will be the same as the previous one. From here, you can proceed to make any changes you like while retaining the old collection in the background. You might want to save your new collection after you have assembled the desired records and carefully arranged them.

Collections stored with previous Cumulus versions can be imported (File > Import > Collections.) To store collections at any location, you can use the export function (File > Export > Collections.)

For sending a collection via email to another user, a special export function is provided (File > Export > Mail Collection To.) However, don't forget: Since a collection is always connected to catalog(s), it is necessary for the recipient to have access to the catalog(s) 'serving' the collection.

To make use of a collection you received, you use the import function.

Things You Can Do with Collections

- Create a new collection. (See "New Collection," p. 170)
- Open an existing collection. (See "Open Collection," p. 171.)
- Save a collection. (See "Save Collection As," p. 171 and "Save Collection," p. 171.)
- Search through a collection. (See "Searching," p. 32.)
- Send a collection by e-mail. (See "Export," p. 174.)

Assets/Records

In Cumulus, each asset is represented by one record. Cumulus is able to catalog every sort of digital asset such as Photoshop® image files, video clips, sound clips, or QuarkXPress® page layouts. However, a digital asset can also be a spreadsheet file or even a data stream such as an entry in a data bank that Cumulus is keeping track of for you. Records can contain a thumbnail image of the asset. Records can (and should) be categorized for easy maintenance and searching. (See "Categories," p. 24, for more information.)

Records are not actual copies of the asset. They merely "point" to the original file. This saves disk space and avoids confusion caused by maintaining multiple copies of an asset. Records contain information on the assets, which is called metadata. Using metadata makes it possible for Cumulus to track your assets and find their records at lightning-speed. A record is the sum of metadata stored on an asset. The metadata is kept in Record Fields.

Canto is setting the pace in the asset management field with its TAG files, which hold all of the information that can be viewed in the Asset Information application – and more. TAG files have been developed by Canto to be the standard file format for the storage of metadata in the field of asset management. Cumulus can create TAG files when cataloging assets from a location where the user is allowed to save files. For how to activate this option, see "Browse for Assets," p. 171.

All records contain at least some searchable information in their record fields on the asset file they represent. Generally, the range of information each record includes depends on the kind of asset represented.

However, Cumulus makes it possible to determine precisely what sort of information should be kept on assets. Remember, this can be defined differently for each catalog as each catalog has its own properties. It is the catalog settings that determine what information is stored on the assets in the record fields.

As it comes 'out of the box,' Cumulus has many record fields ready to be filled while cataloging, depending on the nature of the asset. Not all of the record fields that Cumulus supports are activated with Cumulus' default settings.

Asset Information

The information stored on an asset can be viewed and edited in the Information view or in the Information window.

What you see depends on:

- the fields selected to be displayed in the current Record View Set.
- the fields of the catalog the asset is cataloged in and whether these fields contain any information or not.

TIP:

The View Set you select should match with the catalog(s) you use it with. For example, if you have a special catalog for images that includes all fields that are important for images and you use a View Set that was designed for audio files, you may not see much information. If the catalog does not contain the fields that are selected for display in the View Set, no information can be displayed.

TIP:

You can easily access the preferences of Record View Sets by selecting the **Customize** entry in the list for selecting Record View Sets. This entry opens the preferences for the current Record View Set.

To change to the Information View, click on the toolbar. To open the Asset Information window for an asset:



- 1. Select the record of the asset of which you want to see the information.
- 2. Select **Metadata** > **Information** or click on the toolbar. The Asset information window opens.

Once the Asset Information window is open you can use the arrow buttons to load other records into the window. For more details on the Information window, see "Information Window," p. 28.

Field Types

Information on assets can be viewed and accessed via record fields and information on categories can be viewed and accessed via category fields. Cumulus can store different kinds of information. Consequently, Cumulus features many different field types for storing information. The different field types are (the examples are drawn from the default record fields):

- String Can be used to store textual information (e.g. Notes).
- Boolean Great for on/off, yes/no options. Displays as a check box (e.g. Don't Delete Record).
- Integer Any non-fractional number up to 32 bits (e.g., non-decimal numbers as a price of \$2).
- Real Any number up to 64 bits (e.g., a decimal number such as a price of \$2.99).
- Long Can store 64-bit integer numbers.
- Data Size size in bytes (can store 32-bit values up to 4 GB)
- Data Size (Long) size in bytes (can store more than 4 GB values up to 64-bit values)
- Date Any valid date (day and time) later than 1970 entered in the format of your computer's system settings (e.g., Record Modification Date).
- Date only any valid date for any day entered in the format of your computer's system settings.
- Time only Any valid time of day entered in the format hh:mm:ss. Optionally you can also enter milliseconds by employing a dot as separator: hh:mm:ss.123
- Length in inches displayed in the measurement you have chosen in your User Settings for the Cumulus application.
- Resolution in dots per inch.
- **Binary** Not user-editable; administered by custom asset information applications, which can manipulate and store binary data for further automation.
- Asset Reference Special binary field used for asset references only. Not user-editable.
- Picture Pictures can be pasted into these fields (e.g., Thumbnail).
- String List This field type supports lists, such as menus, which can make data entry easier. The items in the list can be defined by the user (e.g., Status).
- Audio Can store voice annotations that can be recorded directly into the computer or come from the assets themselves.
- Label Enables users to label records by assigning colors.
- Rating Enables users to rate assets or records.

• Table – Special field type that can include other metadata fields. This field type was designed for special usage purposes, e.g. the user comments added to a preview are managed by such a field. The fields included in a Table field can be configured to be searchable and sortable.

Asset Types Supported

Cumulus can catalog any kind of digital asset you throw at it. Moreover, it directly supports file formats with specially developed filters. (See "Asset Format Support," p. 122, for details on supported formats.) Visit Canto's website (www.canto.com) for news, updates and downloads, including new file filters as they are developed (for registered users only).

Editing Asset Information

In general, you can edit the information stored on an asset. But you can only edit information which is stored in record fields you are allowed to edit.

To edit the information stored on an asset:



- 1. Select a Record View Set that displays the information you want to edit in the Information View or the Asset Information window.
- 2. Select the record you want to edit and change to Information View or open the Asset Information window.
- 3. Click the field you want to edit.

 Fields with white backgrounds can be edited. If a field has a gray background, then it cannot be edited. (Either you are not allowed to edit or the field is not editable in general.)
- 4. Make your changes.
- 5. Click 🔚 to save your changes.

If you want to edit further records in the collection, you can use the arrow icons to load a new record.

Editing a String Field in Multiple Records

If you are about to edit the content of a string field for multiple records at once and one or more records already contain text in the field you want to edit, Cumulus will ask you how to handle the new text.

Editing Fields with Validators

If a catalog contains fields with validators and one or more of these fields contain invalid values, or if mandatory fields have no value at all, a validator pane is displayed at the bottom of the Information Window or Information View, and the respective fields are marked with a special icon.

The message(s) displayed in the validator pane can be different for each field, depending on the settings defined by the administrator. Clicking on a message immediately activates the field with the erroneous value, even if it is not visible in the first place. As soon as you enter a correct value, both the special icon and the message disappear.

As long as a record contains invalid field values, it can not be saved. Either you fill in appropriate values in all of these fields, or any changes made to the record will be discarded.

Using a Metadata Template

To add information to the metadata information that is stored on an asset, you can employ a Metadata Template. Metadata Templates can be set up by any user. For a description on how to set up Metadata Templates, see "Metadata Templates," p. 129.

To make use of such a template, you can either use it while cataloging (along with the Prefiller Utility, see page 172) or apply the metadata information to the records of already cataloged assets.

There are different methods through which you can apply information from Metadata Templates to records of cataloged assets:

 Select one or more records and then select Metadata > Assign Metadata
 From Template. A list containing all your Metadata Templates is displayed.
 Select the desired one.

NOTE: When using this method all fields that are included in the catalog of the record and that are set in the Metadata Template will be filled with the values of the selected Metadata Template. The changes are immediately saved with the record.

- Open the Asset Information window and then click NOTE: When using this method all fields that are included in the Asset Information window (and that you are allowed to edit), and that are set in the Metadata Template will be filled with the values of the selected Metadata Template. Note that these changes will not be saved until you do so.
- Open the IPTC Information window and then click ...

 NOTE: When using this method all fields that are included in the IPTC Information window (and that you are allowed to edit), and that are set in the Metadata Template will be filled with the values of the selected Metadata Template. Note that these changes will not be saved until you do so.



TIP:

If you have the appropriate permissions, you can easily access the preferences of Metadata Templates by selecting the **Customize** entry in the list for selecting Metadata Template. This entry opens the preferences for the current Metadata Template.

Record Size

In general, a record's size can depend on several factors:

- The size and quality setting of the thumbnail (if you choose to include one).
- The amount of text and notes stored in various record fields.
- The asset format the record represents. (Different assets generally require different amounts of data to describe them.)
- The amount of additional information you include in the record (such as voice annotation).

The customizability of Cumulus means that you can determine what information is stored on the assets in a particular catalog. If catalog size is a concern, there are a few catalog settings to keep in mind. These settings can affect the size of the records cataloged.

Renaming Records

Records are named as the assets they represent by default. Sometimes asset names are not what you would like them to be. For renaming assets (and their records) Cumulus provides a special function. (See "Rename," p. 198, for details.) However, you can also rename the record only. Though there is no menu item specifically for this use, renaming records is easy:



- 1. Select the record to be renamed.
- 2. Select **Metadata > Information**. The Asset Information window opens, which shows information on the asset.
- 3. Find and change the record's name in the **Record Name** field.
- 4. Click 🔚 to save your changes.

If you want to edit more records in the collection, you can use the arrow icons in the Information window toolbar to load a new record.

Editing a Record's Category Assignments

Also found within the default Asset Information window is a list of the categories currently assigned to the record. From this list you can remove category assignments or add new ones.

To remove a record's category assignment:



- 1. Select the record whose category assignments you want to change.
- 2. Select **Metadata** > **Information**. The Asset Information window opens, which shows information on the asset.
- 3. Select the category you wish to remove and press the DEL key.
- 4. Click 🔚 to save your changes.

If you want to edit more records in the collection, you can use the arrow icons in the Information window's toolbar to load a new record. After deleting a category in the category pane, all assignments to this category are automatically deleted as well.

There are different ways to add a category assignment to a record, or to assign a record to a category, depending on your perspective. The perhaps most intuitive way is by dragging and dropping the category to the record, or the record to the category. (See "Editing a Record's Category Assignments," p. 22.) It is also possible to add a category assignment to a record via the Asset Information window, which displays a list of the categories the record is associated with.

To add a category assignment to this list:



- 1. Select the record whose category assignments you want to change.
- 2. Select **Metadata** > **Information**. The Asset Information window opens, which shows information on the asset. If necessary, drag this window aside so that you can also see the Category pane of the Collection window.
- 3. Click the category in question in the Category pane.
- 4. Drag the category to the categories list in the Asset Information window. The category is assigned to the record.

5. Click 🔚 to save your changes.

If you want to edit more records in the collection, you can use the arrow icons to load a new record.

Things You Can Do with Records

- Assign a record to a category. (See "Editing a Record's Category Assignments," p. 22.)
- Change a record's category assignments. (See "Editing a Record's Category Assignments," p. 22.)
- Copy/Cut and Paste records between catalogs and/or collections. (Record categories are copied along with records.)
- Create a new record (same as cataloging assets). (See "Browse for Assets," p. 171.)
- Delete a record and (optionally) its asset. (See "Delete," p. 178.)
- **Drag and drop** a record into another drag and drop-supporting application. Dragging a record copies the asset into the target document. You may prefer, instead, to place the asset manually and access it by reference.
- Export records. (See "Export," p. 174)
- Import records. (See "Import," p. 173.)
- Optimize a records' preview icon. (See "Optimize Thumbnail," p. 193.)
- Print records. (See "Print," p. 175.)
- Rename a record. (See "Renaming Records," p. 22.)
- Rotate a record's preview icon. (See "Rotate Thumbnail," p. 193.)
- Search for specific records. (See "Searching," p. 32.)
- **Update** a record to reflect an edited asset. (See "Update Record," p. 191.)
- **Update** a record to reflect a relocated asset. (See "Update Record," p. 191.) **NOTE:** It's very important to keep records in sync with their associated asset files. If you move an asset after cataloging it, be sure to update its record by using the menu item. (See "Update Asset Reference(s)," p. 199.)
- View and optionally edit a record's asset information. (See "Asset Information," p. 18, for details.)

Things You Can Do with Assets

Cumulus is also able to help you manage your original assets. Cataloged assets can be copied, deleted, moved, printed – all from the Cumulus interface using the Asset menu commands. And when you copy, delete or move an asset, Cumulus takes care of its TAG file at the same time, treating it accordingly. For further information on TAG files, see "Options While Cataloging," p. 172.

- Convert the asset to another file format. (See "Convert To," p. 197)
- **Copy** the asset into another application by dragging the record into the application.
- Create copies of the assets in another location. (See "Copy To," p. 197.)
- Customize the display of the information on an asset. (See "Record View Sets," p. 105.)
- Delete an asset. (See "Delete," p. 178.)
- Move assets. (See "Move To," p. 198.)
- Open assets using the application they were created with or another application. (See "Edit With," p. 196.)

- Preview a record's asset. (See "Preview," p. 195.)
- **Print** assets using the application they were created with or another application. (See "Print With," p. 196.)
- Send your assets by e-mail. (See "Mail To," p. 197.)
- Rename assets. (See "Rename," p. 198.)
- Show information on an asset. (See "Asset Information," p. 18.)
- Show the location of the asset. (See "Show Location," p. 198.)
- Show a preview image of the asset. (See "Preview," p. 195.)

Categories

Cumulus categories are used to organize records, much like folders are used to organize files in a traditional filing cabinet. But the asset can appear in any number of Cumulus categories at the same time. They are similar in purpose to keywords used in other programs.

Simply double-clicking on a category is the most direct method of searching in Cumulus. All records assigned to that category are displayed. You can also use the category list to find contents of two or more categories at a time. Other options for category list searching include the ability to see the contents of categories in the tree either above or below the one you double click. (See "Search & Sort Tab," p. 102, for more detailed information.)

To make organizing easier, Cumulus provides multiple tabs: Instead of having all categories appear in one category pane, categories can be created and displayed in separate tabs.

- The **Keyword** tab contains those categories that are created with the intention of organizing the assets via keywords. These categories may be created manually by the user or automatically by Cumulus Filters and AssetStores.
- The **Sources** tab will display the automatically created categories that resemble the folder or directory hierarchy in which the assets reside.
- Use the **Categories** tab to create your own individual category hierarchy a hierarchy that suits your specific needs.
- The All tab gives you an overview on all categories contained in the current collection. In the All tab the other tabs are denoted as categories with names that begin with a \$ sign.

NOTE: Do not rename or move these special categories.

Categories can be nested within one another. The highest hierarchical category level is the category representing a catalog. It has no categories above it. A category that nests other categories is also denoted by a blue arrow. A square denotes a category that does not nest any other category. To expand a category in order to see its subcategories, click on its arrow. Use drag and drop to move categories to where you want them inside the hierarchie of the category representing a catalog. The categories that you create can be easily moved to other locations at any time.

The Category pane displays all available categories. To check the categories a record is assigned to, open the Asset Information window and check the entries in the Categories field. (For information on how to edit, see "Editing a Record's Category Assignments," p. 22.)

Category Types

Cumulus offers different types of categories: Normal Categories, Related Categories and Folder Categories. These category types have the following characteristics:

- Normal Categories can be created by the user at any position in the category hierarchy. We recommend creating individual categories either in the Categories or the Keyword tab.
- Related Categories are aliases of existing categories which can be created by the user. They can be placed in any position in the category hierarchy. Complete alternate catalog hierarchies can be built using related categories.
- Folder Categories are automatically created by Cumulus during the cataloging process. These automatically created categories resemble the folder or directory hierarchy in which the assets reside. The Source tab displays them all. They are created by default but this option can be disabled

Creating Categories

If you've been snooping around the Cumulus menu bar, you can probably guess how to create a new category.

To create a category:



- 1. Click the category in which the new category should be nested.
- 2. Select **Metadata** > **New Category** or **New Related Category**. This creates a category nested in the selected category.
- 3. Rename the new category. (Category names can be up to 255 characters in length.)

You can easily change the category hierarchies by clicking a category and dragging it on top of another category. This places the category inside the other category. To move a category to the top level of a catalog, drop it on the category representing the catalog.

NOTE: In the **All** tab, never change the hierarchy for the categories with names that begin with a \$ sign as they denote the category tabs.

Renaming categories is easy:



- 1. Double-click the category's name (not its icon). Its name will be selected for editing
- 2. Edit the name. (Category names can be up to 255 characters long.)

Custom Ordering of Categories

By default, the categories displayed in the category pane are sorted alphabetically. As this may not always be the most convenient solution, the order of the categories can be changed manually by dragging a category to a different place in the category tree, e.g. to have frequently used categories shown on top of the category tree.

Custom ordering of categories only works if

- the respective catalog contains the category field *Custom Order*,
- the Enable/Show Language Specific Category Sorting and Custom Ordering option is activated in the used Category View Set,

A custom-ordered category tree is displayed in that order only for users that employ a Category View Set with the **Enable/Show Language Specific Category Sorting and Custom Ordering** option activated. Elsewise the category tree is displayed in the default order.

To manually change the order of categories:



1. Drag any category with the mouse to the position where you want to have it

A thin black line indicates where it will be placed when you release the mouse button.

To override custom ordering and re-establish the alphabetic sorting of categories:



1. Right-click into a category level that you want to sort alphabetically and select **Sort by Name** from the shortcut menu.

The respective level of categories is sorted alphabetically.

NOTE: Sorting categories by name only affects the current level. If subcategories have a custom order, they will retain it. Thus you can sort any level in your category tree either by name or manually as you need it, independent of any other level.

Category Fields

Category fields are used for information that relates to all records assigned to that category, or they can be used to store additional information on the category itself. A significant difference between record fields and category fields is that category fields are not searchable.

Category fields can be activated and set up in the Catalog Settings.

Category Information Window

Information on categories can be viewed in the Category Information window. What you see depends on:

- the fields selected to be displayed in the Category View Set defined for the Category tab the selected category resides in.
- the fields of the catalog the selected category resides in and whether these fields contain any information or not.

TIP: Access Preferences

You can easily access the preferences of Category View Sets by selecting the **Customize** entry in the list for selecting Category View Sets. This entry opens the preferences for the current Category View Set.

To open the Category Information window:



- 1. Click once on a category to select it.
- 2. Select **Metadata** > **Information**. The information window for the selected category appears.

The information on categories can be viewed and accessed via category fields. What category fields are displayed and also how the category fields are displayed depends on the selected View Set.

Once the Category Information window is opened, you can use the arrow buttons to load other categories into the window. For more details on the Information window, see "Information Window," p. 28.

Editing Category Information

To edit the information stored on a category:



- 1. Load the category you want to edit into the Category Information window.
- 2. Click the field you want to edit.

Fields with white backgrounds can be edited. If a field has a gray background, then it cannot be edited. (Either you are not allowed to edit or the field is not editable in general.)

- 3. Make your changes.
- 4. Click 🖫 to save your changes.

If you want to edit more categories, you can use the arrow icons of the Information window's toolbar to load another category.

Categories and Auto-cataloging

Cumulus can auto-catalog the contents of folders that are represented by folder categories in Cumulus. Any new assets saved to this folder will be cataloged periodically, depending on how often you would like this done. This feature can be customized to be performed anything from hourly to daily to weekly. It is performed on the machine you are working at.

To make use of this feature:



- 1. Click the **Sources** category tab. The categories representing folders that can be used for auto-cataloging are displayed.
- 2. Select the category representing the folder you want to have auto-cataloged.
- Select File > Add Assets to Catalog > Setup Auto Cataloging.
 OR

Open the context menu by clicking \bigcirc the right mouse button / \bigcirc Control key + mouse button and select Setup Auto Cataloging.

The Auto Cataloging dialog is opened.

- 4. Activate the **Use AutoSync on Category** option.
- 5. Define the performance options:
 - Select the Asset Handling Set for the auto-cataloging.
 NOTE: You should select an Asset Handling Set with the Skip Duplicates option activated for cataloging. Otherwise all assets in the folder will be cataloged again and again with each run.
 - Under **Next Start**, enter date and time when the function should be performed.
 - Under **Period**, enter the regularity time interval you want the function to be performed. For example: to start it once a day enter 24:00
- 6. Click OK.

NOTE: With this version of Cumulus the Auto Cataloging feature works only for folders that were created when cataloging was performed on the same operating system you are working with. You can check this with the information in the Category Type field. A category of the type Directory Category can only be auto-cataloged when you are working under Windows. And a category of the type Directory Category Mac can only be auto-cataloged when you are working under Mac OS X.

If you want to use this feature with catalogs created with former versions of Cumulus you have to add the following category fields to the catalog:

- AutoSync Asset Handling Set
- AutoSync Next Start
- AutoSync On
- AutoSync Period
- AutoSync User
- Folder Reference

Things You Can Do with Categories

- Assign a category to a record. (See "Editing a Record's Category Assignments," p. 22.)
- Create a new category. ("New Category," p. 195, and "New Related Category," p. 195.)
- Create a related category. (See "New Related Category," p. 195.)
- Delete a category. (See "Editing a Record's Category Assignments," p. 22.)
- Export categories. (See "Export," p. 174.)
- Import categories. (See "Import," p. 173.)
- Move a category inside or outside another category. (See "Creating Categories," p. 25.)
- Remove a category assignment from a record. (See "Editing a Record's Category Assignments," p. 22.)
- Rename a category. (See "Creating Categories," p. 25.)
- Show or hide categories. (See "Collection Basket Pane," p. 181.)
- Use **AutoSync** on categories. (See "Categories and Auto-cataloging," p. 27.)

Information Window

The information stored on an asset or category can be viewed and edited in the Information window. What you see depends on:

- the fields selected to be displayed in the current View Set.
- the fields of the corresponding catalog and whether these fields contain any information or not.

The Information Window

The Information window provides access to the information (metadata) stored on a category or on an asset. The Asset Info window provides access to the information on the asset stored in the record. The Category Info window provides access to the information on a category. Which fields are displayed in which order depends on the selected View Set. The field contents are editable depending on the field type and the properties set for it.

The Information Window

Information Window Toolbar

- 1 Save the edits you made in this window.
- 2 Click to add information from a Metadata Template. (For details on how to set up Metadata Templates, see "Metadata Templates," p. 129.)
 IMPORTANT! The template will only fill in the fields that are included in the

Information window. And only those that you are allowed to edit. Note that these changes will not be saved until you do so.

TIP: If you have the appropriate permissions, you can easily access the preferences of Metadata Templates by selecting the **Customize** entry in the list for selecting Metadata Template. This entry opens the preferences for the current Metadata Template.

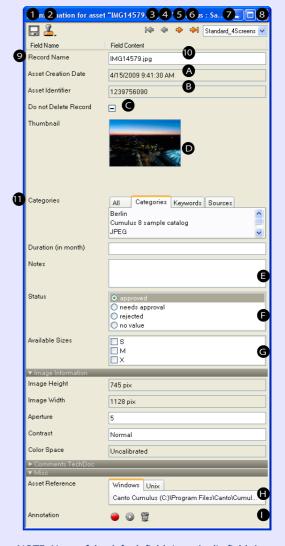
- 3 Loads the first record/category from the collection window's current selection.
- 4 Loads the previous record/category from the collection window's current selection.
- 5 Loads the next record/category from the collection window's current selection.
- 6 Loads the last record/category from the collection window's current selection.
- 7 Displays the selected Record View Set.
- 8 Click to select a Record View Set.

The sample Information window on the right shows:

- 9 Name of the field (as defined in the Catalog Settings).
- 10 Content of the field for the selected record/category (editable or not depending on the field type and whether **Allow User to Edit** is checked in the record field properties). If the field background is dark gray it cannot be edited.
- 11 Displays the categories the asset is assigned to. (For more on categories and category tabs, see "Categories," p. 24.)

The letters mark a few examples of the various field types.

- A **Date:** Can be user-editable; click in field and type new value (or in Windows use arrow up/down keys).
- B **Integer**: User-editable; numbers only (without decimal places), up to 32 bits.
- C **Boolean**: Check box for selected or deselected. (If the field has no value, under Windows the check box and mark are gray and under Mac OS the check box is marked with a hyphen.)
- D Picture: Not user-editable; maintained by Cumulus or an Asset Storage Module.
- E **String**: User-editable; characters and numbers.
- F **String List:** Can only be filled with predefined values. The values are either displayed as a list or as radio buttons (defined in the View Set.) Click the arrow button to select a value from a list.
- G **String List Multi-Select:** The values are displayed with check boxes. You can select multiple values by activating them in the check boxes
- H **Asset Reference:** Not user-editable; maintained by Cumulus or Asset Storage Module.
- I Audio: User-editable; only available when QuickTime is installed on your computer (QuickTime 7.0 is recommended). You can record voice annotations for the record.



NOTE: None of the default fields is an Audio field. An Audio field always has to be set up as a custom field.

- Click to record a voice annotation. A dialog appears from which you can stop or cancel the recording.
- Click to play the voice annotation. (Button changes tofor stopping while playing.)
- Click to delete the voice annotation. (Field has no value then.)

If you have selected multiple records before opening the Asset Information window and the option **Display values identical for all selected records** (**User Settings**> **Display** > **Asset Info Window**) is activated, you can change the field values for multiple records at once. If the asset information of multiple records is shown in one window, only those field contents are displayed which have the same value. So the **Asset reference** and **Thumbnail** fields will always be empty. Check boxes (Boolean fields) with different values appear gray. The field **Categories** only displays those categories the selected records have in common. All other field types are displayed with no value if there are different values for fields.

Fields with different values do not show a value but can be edited - as well as gray (neutral) check boxes. If you add an additional category, this category is added to the set of categories for each record.



If you can't find it, you can't use it. With Cumulus it is easy to find the assets you are looking for as Cumulus provides easy and powerful search capabilities. These are described in this chapter.

Find Assets

Searching

Cumulus provides several ways to search for records: searching by category, quick searching and searching with the Find window. Depending on the size of your catalogs and the complexity of your search requirements, you may find one way better suited to your needs.

Searching for Records By Category

The simplest form of searching for records is simply double-clicking on a category in the Category pane. This quickly finds all of the records that are associated with that category. You can also select more than one category to see all the records associated with the set.

To quickly view the records assigned to categories, hold down ∄ Alt / ♠ both Alt+Cmd and press an arrow key (up, down, left or right).

There are several Preference options that affect the way category list searching works. (See "Search & Sort Tab," p. 102, for more detailed information.)

Searching with Quicksearch

With Quicksearch, Cumulus by default looks for the search term in the following record fields only: Record Name, Document Text, Notes, Keywords, and Categories. The result of the Quicksearch shows all records for which the search term is contained in any one of these fields.

The selection of fields used by Quicksearch can be changed in the User Settings section of the Preferences dialog (see "Search & Sort Tab," p. 102, for details).

Quicksearch performs a "contains" search for all included String fields and String List fields and an "is" search for all included Integer fields.

Search Options

If you enter two or more terms into the Quicksearch field, Cumulus combines these terms with "and". Entering *Canto Cumulus* will result in all records that contain *Canto AND Cumulus* in any of the searched record fields.

To use a term that consists of more than one string, you have to enclose the strings with double quotation marks. Quicksearch handles the strings in quotation marks as one search term. Entering "Canto Cumulus" will result in all records that contain the string Canto Cumulus (i.e. the words Canto and Cumulus separated by a space) in any of the searched record fields.

To combine search terms with "or" rather than with "and", you have to separate them with two pipes (||). Entering *Canto* || *Cumulus* will result in all records containing either *Canto* or *Cumulus* or both.

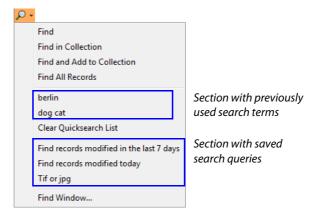
To search for records that do not contain certain terms in any of the searched record fields, you have to prepend the terms with a minus symbol (-). Entering *Cumulus -Cloud* will result in all records that contain *Cumulus*, but do not contain *Cloud*.

To search for one of the special characters you have to put a backslash in front; e.g. \- to find the minus symbol, \&& to find && or \text{V} to find \/.

NOTE: If the Categories field is included in Quicksearch, the search results also depend on the settings specified under **Category Search Also Finds Records of** (Preferences > User Settings > Application > Search & Sort). (See "Search & Sort Tab," p. 102, for details.)

The Quicksearch Menu

The Quicksearch menu is displayed by clicking the arrow button next to the magnifying glass icon.



The Quicksearch menu

Besides a section displaying previously used search terms, and a section displaying saved search queries (see "Saving and Loading Search Queries," p. 40), the Quicksearch menu provides the following entries:

- Find Searches in all catalogs open int the current collection; replaces the current collection with the search result. (Equivalent to the magnifying glass icon.)
- Find in Collection Searches in the currently displayed collection only, e.g. in the result of a previous search. Handy for narrowing down search results.
- Find and Add to Collection Searches in all open catalogs; adds the search result to the currently displayed collection. Handy for broadening a search result.
- Find All Records All records of all open catalogs are displayed. (Equivalent to clicking the icon or pressing Enter on an empty search field).
- Clear Quicksearch List Deletes the previously used search terms.
- Find Window Opens the Find window (See "Searching with the Find Window," below, for details.)

Searching with the Find Window

The Find Window reveals the true search power of Cumulus. Complex search setups (queries) can be constructed to find virtually any type of data stored for an asset. Boolean operators (and, or) increase the query possibilities even further. Different search methods let you define the search area (either all records of all catalogs opened in the current collection or only the records contained in the current collection.) The matches can either be added to the current collection, replace the records in the current collection or comprise a new collection of their own.



A description of the Find window and a comprehensive listing of searchable fields are listed in the overviews "Overview: The Find Window," p. 34 and "Overview: Sample Search Options," p. 35.

Overview: The Find Window

To open the Find window: Select Find > Find Records



- 1 Displays the name of the collection/catalog(s) that will be searched by the query in this Find window and that is referred to as 'current collection'.
- 2 Search criteria.
- 3 Search operator.
- 4 Search value.

NOTE: You can search for whole words, not just for matching strings – if the Record field set as search criteria is activated for word-searching. Enclose the word you are searching for in single quotation marks and Cumulus will only find the records that contain the exact word. For example searching for copy will find records containing the words copy as well as copyright, copyhold, copyfree and so on. Searching for 'copy' will find records containing the word copy only.

- 5 Inserts a new search condition before the current one.
- 6 Inserts a new search condition after the current one.

NOTE: The order of search conditions is important when you connect search conditions with the Boolean operator "or". (For more details, see "Sequence of Search Conditions," p. 37.)

- 7 Will search all open catalogs of the current collection.
- 8 Will search the current collection only.
- 9 Found records/categories are added to the current collection.
- 10 Found records/categories replace the current collection.
- 11 Found records/categories will comprise a new collection.
- 12 Displays help text.
- 13 Opens the Advanced Find windows for entering nested queries.
- 14 All records/categories of those catalogs opened in the current collection will be shown.
- 15 Starts the search.
- 16 Opens a menu for saving or loading queries. (For more details, see "Saving and Loading Search Queries," p. 40.)

NOTE: Cumulus search options are NOT case sensitive.

BACKGROUND INFORMATION: Window Connected to Collection

When a Find window is opened, it is connected to the active collection or catalog window. That's why the name of the source window is displayed in the title of the Find window. It is important to be aware of this fact, when you use an open Find window for multiple searches – especially, if you decide to have the search results displayed in a new collection. Be aware of this fact when using the following search methods:

- Find in Current Collection: the contents of the source window defines the 'search area'
- Find and Add to Current Collection: the matches of the search are added to the contents of the source window

Overview: Sample Search Options									
Criteria	Fiel Typ		r- Searche	Searches for		Sample Data/Instructions			
Categories	Specia	al a	Records asso	Records associated with specified category.		Type category name or drag category onto Value field. Use drag method if catalog has multiple categories of the same name. Current Search Preferences settings affect results. (See "Search & Sort Tab," p. 102)			
Thumbnail	Specia	al b	Similar thum contrast.	Similar thumbnails. Compares brightness and contrast.		Type record name or drag record thumbnail onto Value field.			
Horizontal Resolution	Real	0	Dot-per-inch	Dot-per-inch resolution of an image asset file.			200, 300		
File Data Size	Integ	er ©	The asset file	· · · · · · · · · · · · · · · · · · ·		1024 KB (use KB for kilobytes) 24 MB (use MB for megabytes)			
Asset Creation Date	Date	0	The date the	The date the asset was created.		11/22/97			
Color Mode	String	List d	The color mode of an image.		Select from Value list.				
Cataloging User	String	e	The name of the user who cataloged the asset.		Clint, Carolyn				
Notes	String	•	Records with a <i>group of characters</i> in the Notes field that matches criteria.		Any line of text. For example, "ball" finds ball, balloon and baseball. "ll rights res" finds "All rights reserved."				
Record /Cate- gory Name	String	•	The name of	The name of the record /category.		Balloon, Clouds, Gun Shot / Illustration, Aircraft, Sounds			
Field Тур	oe	Categories	Thumbnail	Date, Real, Integer	String List*	String*			
Operato Menu Options	r	is a is not contains doesn't cont. has value has no value	similar to not similar to	under up to is is not from over has value has no value	is d is not has value has no value	starts with is is not contains doesn't cont. has value has no value	*The menu options for this field type may differ depending on the field properties.		

Using the Find Window

All example searches on the following pages are based on the Sample catalog.

Simple Searches

To set up a simple search (as opposed to a compound search, described on page 36):



- 1. Click **Find > Find Records** or **Find Categories** to open the Find window.
- 2. Select a search criterion from the **Criteria** list. This menu lists all record or category fields activated for searching.



3. Select an operator from the **Operator** menu. This menu lists all operators that are possible for the field type of the field selected as criteria.



4. Either select a value from the **Value** list, type a value in, or drag an appropriate object onto the field. (Appropriate objects can be either thumbnails or categories.)



- 5. Leave the default search method **Search in All Open Catalogs**. This method searches all catalogs included in the current collection.
- Click New Collection so that the records found will be displayed in a new collection of their own.
- 7. Click Find.

Compound Searches

In larger catalogs, finding records with a single search criterion may not be efficient. To avoid sifting through tens of thousands of records, you may need to use more than one search criterion. For example, you may be looking for a photographic image in EPS format.

Cumulus lets you do this in two different ways:

- You can enter a compound search (more than one search criterion), OR
- You can narrow the results of a simple or compound search. (See "Narrowing the Search," p. 38.)

Building a compound search isn't much more difficult than building a simple search. You just have to think in terms of what you are asking Cumulus to do, and then translate that request into the search fields. For example, your request, in English, might read:

"I need all records in the Photographs category that have 'tree' somewhere in their names."

Translated into Cumulus-speak, this becomes:

Category is Photographs and Record Name contains tree.

Now let's break it down into separate search statements, called "conditions."

Category is Photographs

In our first condition, **Category** is our search criterion, **is** our operator, and **Photographs** is the value we're searching for. This tells Cumulus that the records we want are all in the **Photographs** category. This alone would find the records we're looking for, but if our catalog contained thousands of images in the Photographs category, we'd spend quite a bit of time browsing through them all.

and

This next little bit is very important. This is a Boolean operator that tells Cumulus how to consider the previous and next search conditions. By selecting **and**, we tell Cumulus that the records we want must match *both* conditions of our compound search. Another option here is **or**, which would tell Cumulus that the records we want only need to match one of the conditions.

Record Name contains tree

In the second condition of the search, we help Cumulus narrow the search results by giving it part of the record name that we want. We use the operator **contains** instead of **is** because we're looking for records that have 'tree' anywhere in their names. **Is** would require that the record be called exactly 'tree,' with no variation.

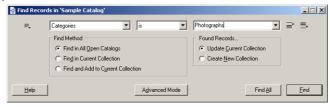
In the Find window, the field values will construct a sentence similar to the one we just broke down. When you can see each condition on a line by itself, it's easier to visualize the results of the request.

Setting up each condition in a compound search is the same as setting up a simple search. The only additional steps are adding a new line of search fields, and specifying the Boolean connector between each condition.

Here's how:



- 1. Click **Find** > **Find Records** to open the Find window.
- 2. Set up the first condition of the search as:



- 3. Click to reveal a second set of fields.
- 4. Select and from the Boolean list, if it's not already selected.
- 5. Set up the second condition of the search so that the window looks like this:



- 6. Leave the default search method **Find in All Open Catalogs**. This method searches all catalogs included in the current collection.
- 7. Click **Create New Collection** so that the records found will be displayed in a new collection of their own.
- 8. Click **Find**. The search finds two images: "Sunset with Tree" and "Tree in Winter."

Additional conditions may be added to further refine the search. Add and delete conditions using the following buttons:

- Inserts a new search condition before the current condition. (The current condition is the line in which a field is highlighted or the flashing cursor lbeam is found. Click in any field to make that line the current condition.)
- Inserts a new search condition after the current condition.
- Deletes the current condition. This is not undoable!

Sequence of Search Conditions

When performing a Find window search Cumulus performs one search condition after the other. The Boolean **and** and **or** operators define how Cumulus has to connect the previous and next search conditions. The operator **and** defines that the records must match *both* conditions. The operator **or** defines that the records need to match *one* of the conditions only. If you have more than two search conditions in a search query, a condition connected with **and** will search the matches of the previous condition and reduce this result – whereas a condition combined with **or** will search the entire 'search area' (as defined under Search Method) and add the new matches to the previous matches.

SPECIAL TECH INFORMATION: Nested Queries

If you want to enclose search conditions in brackets and set up nested queries, you must use the Find window in advanced mode. See "Using the Find Window in Advanced Mode," p. 41, for details.

Examples

Search Query A:

Category is Photographs

and

Record Name contains penguin

and

Record Name contains balloon

First, Cumulus will search for all records that are assigned to the category **Photographs** and then, second, the result will be refined by searching for records that contain **penguin** in their names. Third, this result will be refined by searching for records that contain **balloon** in their names.

In the Sample Catalog the final result of this search guery is:

· Penguin Balloon.psd

Search Query B:

Condition 1: Category is Photographs

and

Condition 2: Record Name contains penguin

or

Condition 3: Record Name contains balloon

First Cumulus will search for all records that are assigned to the category **Photographs** and then, second, the result will be refined by searching for records that contain **penguin** in their names. Third, the 'search area' (as defined under Search Method) will be searched for records that contain **balloon** in their names and the matches will be added to the results of the previous conditions.

In the Sample Catalog the final result of this search query is:

- Penguins.jpg
- Penguin Balloon.PSD
- Balloon Race.BMP

Narrowing the Search

If the results you get from either a simple or compound search are too broad, Cumulus can help. The search method **Find In Current Collection** allows you to search through the set of records contained in the current collection, instead of the entire catalogs of the current collection, thereby reducing the number of records found.

Using our example from the compound search section, we'll perform the same search using the search method **Find In Current Collection**.



- 1. Make sure that the active window contains the collection of records you want to be searched.
- 2. Click **Find** > **Find Records** to open the Find window.

3. Set up the first part of the search as:



- 4. Leave the default search method Find in All Open Catalogs.
- 5. Click **Update Current Collection** so that the records found will replace those in the current collection.
- 6. Click Find. Cumulus finds all records in the Photographs category.
- 7. Now change those same fields to:



- 8. Click Find In Current Collection as the search method.
- 9. Click **Current Collection** so that the records found will replace those in the current collection.
- 10. Click **Find**. Cumulus searches through the ten records found in the first search and narrows the set of records down to just two images: "Sunset with Tree" and "Tree in Winter."

If it helps, you might want to think of Narrow Current Collection as an **and** Boolean operator. That is, after your first search, you conduct another search with different search criteria, and the final results are the same as from the corresponding compound search using **and**. In the example above, the same final results were achieved with the compound search previously conducted.

Broadening the Search

If the results you get from either a simple or compound search are too narrow, Cumulus can be of assistance again. The search method **Find and Add to Current Collection** adds the results of a subsequent search to the records contained in the current collection.

Let's conduct an example search using the **Find and Add to Current Collection** search method:

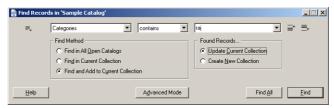


- 1. If the Find window is not open, click **Find** > **Find Records** to open it.
- 2. Set up the first part of the search as:



3. Leave the default search method **Find in All Open Catalogs** for this first step.

- 4. Click **Create New Collection** so that the records found will be displayed in a new collection of their own.
- 5. Click **Find**. Cumulus finds four records: "Camels in India," "Indian Camel," "Indian Music," and "Sunset with Tree."
- 6. Now use the same search criteria, but change the search method to:



- 7. Click **Find and Add to Current Collection** as the search method.
- 8. Click **Update Current Collection** so that the records found will supersede the current collection.
- 9. Click **Find**. The record "Map" is added to the four records found with the previous search, and your current collection is comprised of five records.

This search method can be seen as an **or** Boolean operator. That is, after your first search, you conduct another search using a different criteria, and the final results are the same as from the corresponding compound search using **or**.

Saving and Loading Search Queries

Although Cumulus remembers your search set-ups if you leave them open when you quit Cumulus, you can also save search set-ups, called queries. This prevents you from having to rebuild them each time you need them. It also ensures that your searches are consistent from session to session, which is important for some purposes. Cumulus query files can be used on any supported platform. You can store and load queries for quick retrieval.

To save the current query:



- Click the button and select Save.
 A dialog appears in which you can name the query.
- Type a name for the query in the Query Name field.
 If you want the query to be available for other users, activate the Share Query option.
- 3. Click Save.

The query is stored in one of the two special query files Cumulus provides – one for the individual queries of a user and the other one for shared queries.

To load a query:



- 1. Click the 📃 button. A menu containing entries for all queries that are available to you is displayed.
- 2. Select the entry for the desired guery file.

If you want to store a query as a separate file anywhere in the file system, you have to export it:



Click the ■ button.

- 2. Select **Export**. A dialog appears from which you can save the current query anywhere in the file system.
- 3. Select a location.
- 4. Click the button Save.

To load such an exported query file you have to import it:



- 1. Click the button.
- 2. Select Import. A dialog appears from which you can select a query.
- 3. Select a query file.
- 4. Click the button Open.

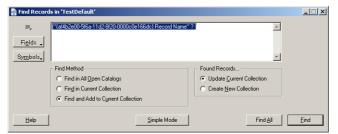
Things You Can Do with Searches/Queries

- Create a new search condition. (See "Compound Searches," p. 36.)
- Load search queries. (See "Saving and Loading Search Queries," p. 40.)
- Save search queries. (See "Saving and Loading Search Queries," p. 40.)

Using the Find Window in Advanced Mode

This mode is designed for advanced users only who know how to set up search queries that are of greater technical depth. In standard mode, the Find window combines search conditions in a sequence for a complex query, whereas in advanced mode, the Find window allows you to set up nested queries. If you are working in a multilingual environment, the advanced mode provides another advantage as the queries that are set up in this mode are language independent.

To switch the Find window to advanced mode, click the **Advanced Mode** button in the Find window. In advanced mode the Find window looks like this:



In the edit field you can enter any combination of search criteria, operators, values, and Boolean operators. This description explains the possibilities. It is provided in English only.

NOTE: If the edit field was empty before you switched to the advanced mode, the field will contain the search query set up in standard mode.

Record fields that can be used as search criteria are displayed when you click the **Fields** button. This list displays all fields contained in the current collection that are indexed for search. If you select an item in this list, it is inserted in the edit field of the Advanced Find window at the current cursor position.

The symbols you can use for search combinations are displayed when you click the **Symbols** button.

If you select an item in this list, it is inserted in the edit field at the current cursor position – exception: If you have marked a selection and then choose the "com-

bine" symbol, the "combine" symbol will wrap the selection (opening bracket at the start and closing bracket at the end of the selection).

You can also set up a query in standard mode first and then switch to advanced mode. When switching back to standard mode by clicking the **Simple Mode** button, the query will be the same as before switching to the advanced mode. Note that it does not reflect the changes made in advanced mode. When changing back to advanced mode, the query set up in this mode is displayed again.

Searching for Categories

!Certain Cumulus configurations enable you to search for categories as well. They provide two Find Windows: one to search for categories and one to search for records. But both look and work the same.

The difference is the result of your search. The categories found as a result of your search are displayed in the Category pane. The found categories are displayed and can be used. The categories above the found categories are also displayed – they are displayed for orientation only.

The categories found as a result of your search can either replace the categories of the current collection or comprise a new collection of their own.

NOTE: The result also depends on the Live Filtering options the Cumulus Administrator may have set for you.

User Live Filtering

User live filtering enables you to set parameters that serve as a filter for all the records you find. Easily hide the file formats you don't need, make sure what you see has been approved for use, or any other combination you need. Save your filters and even share them with others.

With User Live Filtering activated, the records on your Record pane get 'filtered' by conditions you set up.

You activate and deactivate User Live Filtering via the Filter icon in the Record pane top bar.



As long as filtering is active, any further search operation – Quicksearch, Category Search, whatever – will only take into account the collection as defined by the filter criteria, not the whole catalog. Accordingly, the **Find All Records** command will only find records that match the filter criteria.

Adding Filters

Create filters to quickly find files. For example, you can create a filter to find all files in a specific workflow state, a filter to limit the results you see in the Cumulus window to certain file types or to just those assets that belong to a certain client. Conditions define the criteria that files must meet to be included in filter results. You can combine multiple conditions to perform more complex filtering. To add a filter condition:



1. If filtering is not activated, click the Filter icon.



2. Click the plus sign icon. A list of record fields opens.

The list contains all record fields that are contained in the catalogs opened in the current collection and that have **Include Field in Find and Filter Options** activated in their properties.

NOTE: Record Fields Offered as Criteria

Per filter a record field can only be used once as a criteria for a condition. This means that a record field already used for a condition is not offered in the list when adding a new condition.

3. Select the record field you want to function as criteria.

The **Define Filter Condition** dialog opens.

Depending on the field type of the field you selected as search criteria, the options differ.

- 4. Set the criteria records must meet to pass the filter. For information on the different options, see "Using Filters," p. 44.
- 5. Click **OK** to save your settings and activate the filter condition.



Managing Filters

To add additional filter conditions, repeat steps 2-5.



To edit an existing filter condition, maximize the pane ($\ensuremath{\,\overline{\vee}\,}$) and click the pencil icon.



To remove a filter condition, click the minus sign icon in the maximized pane. To remove all filter conditions at once, from the Manage Filters menu select **Remove all Conditions**. Note that conditions not saved as filter will be lost.



Saving Filters

Use Manage Filters menu to save the active filter conditions as a filter under a name. Saved filters are added to the menu and can be used any time you need them. You can share them with others.



- 1. Click the Manage Filters icon to open the menu.
- 2. Select the Save Filter option. The Save Filter dialog opens.
- 3. Enter a Filter name. Make sure you use a descriptive name.
- 4. Click **OK** to save the filter.

An entry for this filter is added to the Manage Filters menu.

Using Filters

You can filter the records of a collection window to display specific records only. Use the Manage Filters menu to select the desired filter.



- 1. Click the Manage Filters icon (■,) to open the menu.
- 2. The available filters are listed at the bottom of the menu. The menu displays all shared filters in addition to private filters that you created.
- 3. Select the desired filter.

Only the records of assets that meet the filter criteria are displayed.

Deleting Filters

Use the Manage Filters menu to delete filters you need longer.



1. Click the Manage Filters icon to open the menu.

- 2. Select the **Delete Filter** option. The Delete Filter dialog opens. It lists the available filters.
- 3. Select the filter you want to delete.
- 4. Click **OK** to delete the filter. The entry for this filter is deleted from the Manage Filters menu.

Configuring Filters

Filters comprise one or multiple conditions.

Defining Conditions in General

Conditions are criteria that records must meet to be included in filter results. Depending on the field type of the field you selected as criteria, the options differ. For most of them you first have to decide on one of the three main options – either on one of the simple ones:

- Has value Record will be included in the filter result if the field contains something.
- Has no value Record will be included in the filter result if the field is empty. Or the third one which offers further options that allow a precise description:
- Matches / Does not match (for most types) OR Contain / Does not contain (String lists only) OR Is assigned to (Categories field only)

The further 'sub-options' depend on the field type and range from general search criteria to exact matches with existing values. For most types the option **From existing values** is offered. It enables you to search for exact matches with existing values.

Field Type Specific Condition Options

The options offered as conditions depend on the type of the field you have selected as search criteria.

String

Limits filter results to records with: Text that matches or does not match specific text string or a regular expression

Select a matching option:

- Select **Matches** to search for records that contain the text.
- Select **Does not match** to search for records that do not contain the text. Select the type of value to search for and enter or select the value:
- Select **Custom value** to search for a text string you define. Enter the string and select the search operator.
- Select From existing values to search for exact matches with existing values.
 Once you have activated this option, existing values are displayed which you can select to be searched for.

String List

Limits filter results to records with values, such as workflow states, that contain or do not contain any or all of the values selected.

Select an option to indicate if the results contain the selected values:

Select Contains the following items to search for records that contain the values.

• Select **Does not contain** the following items to search for records that do not contain the values.

Select the value(s) to search for:

 Select Restrict to existing values to search for exact matches with existing values. Once you have activated this option, existing values are displayed which you can select to be searched for.

Long & Integer, Real & Data Size

Limits filter results to records with: numbers that match or do not match a number or numbers in a range. Integer restrictions, which are based on non-decimal numbers, limit results to records that contain or do not contain numbers in a range or list.

Select a matching option:

- Select **Matches** to search for records that contain the numbers.
- Select Does not match to search for records that do not contain the numbers.

Select the type of value to be searched for, and enter or select the value:

- Select **Range** to search a range of values. Enter the **From** and **to** values.
- Select **Any of the following numbers** to search for multiple numbers. Enter the numbers to be searched for, separated by semicolons.

TIP: Greater Range

You can search for ranges greater than or less than a specific value. Leave the **From** field empty to search for matches less than the value in the **to** field. Leave the **to** field empty to search for matches greater than the value in the **From** field.

Select From existing values to search for exact matches with existing values.
 Once you have activated this option, existing values are displayed which you can select to be searched for.

Time Only & Date Only

Limits filter results to records with: Time data or dates that match or do not match a specific date, date range, or time period.

Select a matching option:

- Select **Matches** to search for records that contain the selected dates.
- Select **Does not match** to search for records that do not contain the selected dates.

Select the type of value to be searched for and enter or select the value:

- Select **Range** to search a specific date/time range. Enter the range in the **From** and **through** fields.
- Select **Any of the following dates/times** to search for multiple statements. Enter the time data to be searched for, separated by semicolons.

TIP: Greater Range

You can search for ranges greater than or less than a specific value. Leave the **From** field empty to search for matches less than the value in the **to** field. Leave the **to** field empty to search for matches greater than the value in the **From** field.

Select From existing values to search for exact matches with existing values.
 Once you have activated this option existing, values are displayed which you can select to be searched for.

Date/Time

Limits filter results to records with: Dates that match or do not match a specific date, date range, or time period.

Date range restrictions limit results to records that contain or do not contain a date range, date/time range, or time period.

Select an option to indicate if the results meet the specified dates and times:

- Select Matches to search for records that contain the selected dates and times.
- Select **Does not match** to search for records that do not contain the selected dates and times.

Select the time period to search.

• Select **From date** to search a specific date range. Enter the range.

TIP: Greater Range

You can search for ranges greater or less than a specific value. Leave the **From** field empty to search for matches less than the value in the **to** field. Leave the **to** field empty to search for matches greater than the value in the **From** field.

- Select **From date/time** to search a specific date/time range. Enter the range. This option is only available for date/time fields.
- Select a time period option to search a specific period, such as last week or last year. This option is only available for date fields that include the time, such as event date/time fields.
- Select In the to search a specified number of days, weeks, months, or years before or after the current date. Select Last or Next, enter a number, and select the time period.
- Select **From existing values** to search for exact matches with existing values. Once you have activated this option, existing values are displayed which you can select to be searched for.

Boolean

Limits filter results to records with: True or false set Select an option.

Categories

Limits filter results to records that are assigned to any or all categories selected. Check the categories to be searched for. Note that the categories available under **Is Assigned To** depend on the tab currently selected in the Category pane.



If you intend to do anything more than simply browsing through catalogs, you should read this section. It describes how to use, present and share your cataloged assets. This is followed by a few simple guidelines that will ensure your workflow is as efficient as possible.

Use Assets

Drag and Drop

Cumulus does not only support drag and drop in the Cumulus application and for cataloging. From within Cumulus you can drag and drop assets into other applications that support drag and drop. Under Mac OS you have to press the ALT key when starting dragging.

Copying Assets

You can drag and drop a record into another drag and drop-supporting application. Dragging a record copies the asset into the target document. Dragging a record into the Windows Explorer or the Mac OS X Finder copies the asset into the selected folder.

NOTE: It is not recommended to use drag and drop for copying a large number of files, because this may seriously impact the performance of your system and the available disk space. To copy a large number of files, use the **Copy to** menu command instead.

The reason for this is that both methods are handled in different ways internally. With the **Copy to** menu command, Cumulus creates a temporary file for each asset which is deleted as soon as the asset is copied. On the other hand, with drag and drop, temporary files of all selected assets are created before the first asset is copied, and these temporary files are not deleted until a new copy process via drag & drop is started, or Cumulus is closed.

Copying Categories and Associated Assets

Categories can be dragged and dropped – along with the assets associated with each category – into the Windows Explorer or the Mac OS X Finder. When you drop the categories, Cumulus creates a folder with the same name as the category and copies the assets to that folder. If the category contains subcategories, subfolders will be created and the assets assigned to these subcategories are copied to the corresponding subfolders.

This option may be handy for collecting production files for output (assuming the files all have at least one common category, such as project name).

To copy categories and associated assets:



- 1. Select one or more categories that you want to copy along with the associated asset files.
- 2. Drag and drop the selected categories into the target application.

NOTE: If you use this way of copying assets, any associated metadata files (e.g. TAG files) will not be copied even if the corresponding metadata modules are activated.

A folder named as the category is created containing the asset assigned.

You also have the option of copying only the asset files associated with selected categories (see "Copy Assets Assigned to Category To," p. 197).

Using Asset Actions

Cumulus Asset Actions simplify your daily workflow needs. An Asset Action refers to a combination of certain functions and can be saved under a chosen name. Whenever you wish to perform this combination of functions, all you have to do is select the corresponding Action and it will be done. You can perform an Asset

Action either on selected records or when mailing assets. To perform an Asset Action on records selected in the Record pane, you employ the menu item **Asset** > **Perform Asset Action**. (For details, see below.) To perform an Asset Action on records in the Collection Basket pane, you employ the Collection Basket's toolbar. (For details, see "Outputting the Collection Basket's Contents," p. 182.

These Asset Actions can be defined in your User Settings in the Preferences dialog – for a description, see "Cumulus Asset Actions," p. 124.

To perform an Asset Action on records in the Record pane:



- 1. Select one or more records.
- Select Asset > Perform Asset Action. A submenu opens that lists the available Actions.
- 3. Select the desired Asset Action.

Depending on how the action is defined dialogs for the included modules may show up. Make your selection and click the appropriate buttons. The Actions will be performed on the selected records.

Progress information is displayed on those actions that take a certain amount of time.

If the selected Asset Action failed to be performed on certain assets, theses assets are listed as soon as the Asset Action is completed, together with the respective error messages.

Clicking **Reveal in collection** displays these assets in a collection of its own for further processing.

Clicking **Ignore** closes the window without any further action.

Mailing Your Assets

Cumulus also lets you e-mail the assets themselves, so that you can easily share them with people who don't have access to your Cumulus catalogs. You can use Cumulus' powerful search and display features to find just the right assets, and then send them off with a single command.

To e-mail assets from within Cumulus:



- 1. Select one or more records whose assets you want to mail.
- 2. Select **Asset > Mail To**. A dialog opens prompting whether you want to send the original asset or to have a Cumulus Action performed on the asset(s) before it is sent.
- 3. Select the desired option (and if you decided on an Action, the desired Action) and click **OK**.

Cumulus in launches your e-mail application (in case you have more than one, offers you a menu to select) / launches your default e-mail application and attaches the selected asset(s) to an outgoing message. (If you decided on an Action, the result of the Action will also be saved as defined for the delivering module of the Action.)

Previewing Assets

Cumulus provides several ways of previewing assets:

- Preview pane
- Preview view
- Preview window
- Fullscreen Preview
- Fullscreen Slide Show

Viewing an asset in Preview view or window lets you add user comments to it. In Fullscreen Preview you can compare up to six different assets and add labels and ratings. The Fullscreen Slide Show displays assets as fullscreen previews in a slide show. The Preview pane can be opened additionally at the left side of a collection window.

Preview View and Window

The records' assets must be available to display.

Previews can be zoomed in or out and displayed in different sizes using the window's toolbar or menu options. (See "Overview: Toolbars for Previews", below, and see "Zoom In," p. 187, and "Zoom Out," p. 187.)

The default size of the preview display can be set in the User Settings. (See "Overview: User Settings (2) – Display Tab," p. 103).

Overview: Toolbars for Previews

Toolbar for

Preview Window

Preview View



- 1 Select tool: Use to select an area of the preview.
- 2 Handtool: Use to move around the preview so you view all areas of it. (Works only if the preview is larger than the window.)

NOTE: Toggling between Hand Tool and Select Tool! Activating the Hand Tool deactivates the Select Tool and vice versa.

- 3 Not available with Single User
- 4 Not available with Single User.
- 5 Not available with Single User.
- 6 Not available with Single User
- 7 Rotates the preview 90° counter-clockwise
- 8 Rotates the preview 180°
- 9 Rotates the preview 90° clockwise
- 10 Zooms in the preview.
- 11 Zooms out the preview.

TIP: Independent from the selected tool, using the ALT key in conjunction with the mouse lets you move the image inside the Preview window.

12 Shows preview in original size.

- 13 Fits preview to window.
- 14 Shows preview in fullscreen.

TIP: If you have a fullscreen preview, you can use the mouse scroll wheel to get the next or previous asset displayed.

- 15 If activated, the displayed preview follows the selection in the collection window (same behavior as the Information Window). If not activated, the displayed preview remains independent from the selection in the collection window and must be changed manually.
- 16 Closes the window.
- 17 Shows the preview of the first record from the current collection.
- 18 Shows the preview of the previous record from the current collection.
- 19 Shows the preview of the next record from the current collection.
- 20 Shows the preview of the last record from the current collection.
- 21 Displays the current Record View Set; clicking on the arrow opens a selection list of available Record View Sets.

You can copy all or part of a preview to the Clipboard. To select a portion of the preview image:



- 1. Click the Select Tool () on the toolbar and then click and hold the mouse down in the upper left hand corner of the region you want to copy.
- 2. Drag the mouse to the lower right of the region. A box is drawn around the selected area.
- 3. Press **♠ Command** / **♠ Control** and **c** to have the selected portion on the Clipboard.

The selected portion of the preview is on the Clipboard and may be pasted into other applications. Remember, this is a copy of the preview image, not the actual asset

A selected portion of a preview can also be zoomed in:



- 1. Click the Select Tool () on the toolbar and then click and hold the mouse down in the upper left hand corner of the region you want to zoom in.
- 2. Drag the mouse to the lower right of the region. A box is drawn around the selected area.
- 3. Click the Zoom in icon () on the toolbar to have the selected portion fill in the entire size of the Preview window.

Multi-page Previews

Multi-page previews are available for the following file formats: GIF, InDesign, JPEG, PCX, PDF, PowerPoint Presentations, Photoshop, Quark XPress, and TIFF. For InDesign a multi-page preview can be provided only if one of the following requirements is fulfilled:

- A Cumulus Metadata file (TAG file) is available which was created by the Cumulus Plug-in for Adobe InDesign

 OR
- The corresponding XPV file is available (and a licensed HELIOS Image Server accessible in the network).

For Quark XPress a multi-page preview can be provided only if one of the following requirements is fulfilled:

- The corresponding XPV file is available (and a licensed HELIOS Image Server accessible in the network)
- The Cumulus DDS Companion is installed and configured in the Cumulus Quark DDS Filter

 OR
- Under Mac OS: Quark XPress is installed.

NOTE: The preview always shows the current status of an asset. So the number of pages/slides might differ from those cataloged as contained sub assets if the asset has changed and the records were not updated.

Fullscreen Preview

The Fullscreen Preview window offers an interactive display of up to six different assets at once, making it easy to pick the perfect one each time – compare quality, sharpness, composition, etc.

Opening the Window

Select the records of the assets you want to have displayed in the window and select **Asset > Fullscreen Preview**.

Using the Window

You can have record fields displayed. What is displayed along with the previews depends on the selected Record View Set and its setting for the Preview window. (For a description on how to configure the view of the Preview window see "Record View Sets," p. 105.) Always displayed on the statusbar and not depending on the selected Record View Set are the fields Record Name, Label and Rating (if contained in the catalog.)

Linking Panels

In Fullscreen Previews of multiple assets, two or more panels can be linked together for synchronous zooming, rotating and panning.

To link panels:



1. Click the picon on the statusbar of every panel you want to link, OR

In linked panels, the licon is highlighted.

To unlink panels, i.e. to exclude them from synchronous zooming, rotating and panning.



1. Click the highlighted icon of every panel you want to unlink, OR

CTRL-click / CMD-click any of the licons to unlink all panels in the fullscreen preview.

NOTE: In fullscreen previews of single assets, the *icon* is not displayed.

Displaying the Info Window

Ready "slide on" access to the Info Window makes metadata edits easy. Move your mouse pointer to the left edge of the screen and the Info window will show up. Click the pin icon to dock it so it will stay when you change the mouse pointer position.

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Using the Toolbar

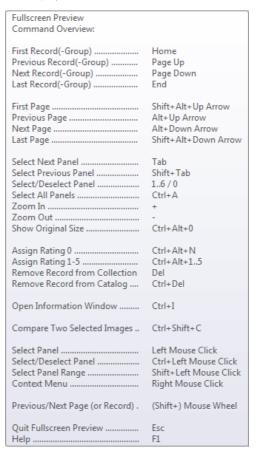
Move your mouse pointer to the bottom of the window and its toolbar pops up.

Fullscreen Preview Toolbar Items

- 1 Shows the preview of the first record from the current collection.
- 2 Shows the preview of the previous record from the current collection.
- 3 Shows the preview of the next record from the current collection.
- 4 Shows the preview of the last record from the current collection.
- 5 Shows/hides statusbar (comprising label, rating, rotating & zooming icons.)
- 6 Mouse over: Display list of available commands / Click: Open help system
- 7 Closes the window.

Displaying a Command Overview

Position your mouse pointer on the question mark icon to have a list of available commands and keyboard shortcuts is displayed. Click on the question mark to access the Cumulus help system.



Marking Assets

In the Fullscreen Preview window you can mark assets by using labels and ratings.

Color labels are set using the square symbol. Clicking on this icon opens a list of available labels. Select the label you want to mark the asset with.

Adjusting Preview Size

The magnify glass icons of the statusbar let you scale how an asset is displayed within each preview area (panel). To zoom in on a preview image, you also use the + (plus) and - (minus) key shortcuts.

Rotating Previews

The rotation icons of the statusbar let you rotate a preview 90° clockwise or counter-clockwise.

Next and Previous Assets

You can use the arrow icons of the toolbar or the PAGE DOWN and PAGE UP key to load assets in the window. When there is more than one asset on-screen, the asset that is changed is the one that is marked as selected by a light green border and a big check mark symbol. If none is selected, the entire group of previewed assets is replaced by the next group. If one is selected, the PAGE DOWN key changes the asset to the next one in the collection and the PAGE UP key changes it to the previous one. You can also use the mouse wheel to scroll through.

TIP:

If multiple assets are displayed in the Preview window, a single asset can be loaded into more than one preview area, enabling you to pan, zoom and examine it in detail. To load another preview in a preview area, select the preview area and use ALT+Mouse Wheel.

NOTE: Linked preview images are navigation locked, i.e. they never change position and can't be replaced with other assets via the PAGE UP / PAGE DOWN keys or scroll wheel navigation.

Comparing Previews

Any two selected preview images can be automatically compared by Cumulus, with a visual representation of the comparison result displayed in the Fullscreen Preview. For details, see "Preview Comparison," p. 57

Fullscreen Slide Show

Shows assets as fullscreen previews in a slide show. You can load the assets manually or run them in a loop.

Opening the Window

Select the records of the assets you want to have displayed in the slide show and select **Asset > Fullscreen Slide Show**.

Using the Window

You can have record fields displayed. What is displayed along with the previews depends on the selected Record View Set and its setting for the Preview window. (For a description on how to configure the view of the Preview window see "Record View Sets," p. 105.)

Using the Toolbar

Move your mouse pointer to the bottom of the window and its toolbar pops up

Fullscreen Slide Show Toolbar Items

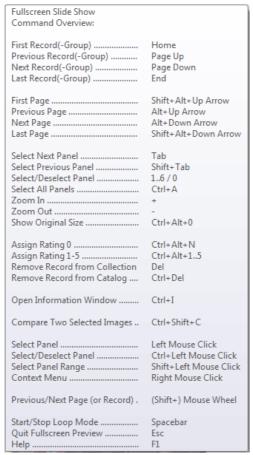
- 1 Shows the preview of the first record from the current collection.
- 2 Shows the preview of the previous record from the current collection.
- 3 Shows the preview of the next record from the current collection.
- 4 Shows the preview of the last record from the current collection.
- 5 Displays how many seconds each slide (asset's preview) will be displayed in a looping slide show. You can enter the number of seconds you want.
- 6 Stops/starts the loop.



- 7 Shows/hides statusbar (Statusbar comprises of label, rating, rotating & zooming icons.)
- 8 Mouse over: Display list of available commands / Click: Open help system
- 9 Closes the fullscreen slide show.

Displaying a Command Overview

Position your mouse pointer on the question mark icon and a list of available commands and keyborad shortcuts is displayed. Clicking on the question mark accesses the entire Cumulus help system.



Preview Comparison

Cumulus provides a smart option that allows you to compare two image assets. A visual representation of the comparison result as well as the previews of the compared assets are presented in fullscreen preview.

The comparison is done on a pixel-by-pixel base, i.e. any pixel in the preview of an asset is compared to the according pixel in the preview of the other asset. The

comparison result is computed – and displayed – as the difference of the RGB values of the corresponding pixels. Pixels that are identical in both images appear as black in the comparison result.

If the two images to be compared have the same aspect ratio but different sizes, the larger one is scaled down to the size of the smaller one. If the images differ both in size and aspect ratio, they are overlaid centered.

Compare Previews is especially useful for detecting subtle differences in apparently identical image assets.

Starting the Comparison

The preview comparison can be startet either from the collection window, or from the fullscreen preview.



 In the collection window, select the records of the two assets you want to compare, then select Asset > Compare Previews.

OR

In a Fullscreen Preview of multiple assets, select the previews of the two assets you want to compare, then open the context menu (with \bigcirc the right mouse button / **Control** key + mouse) and select **Compare**.

Using the Window

A fullscreen preview comprising a comparison result behaves the same way and offers the same options as any fullscreen preview (see "Fullscreen Preview," p. 54.)

The statusbar of the panel with the resulting image displays the title **Comparison Result** and the current zoom factor.

By default, the comparison result and the two previews of the compared assets are linked for all zooming, rotating and panning commands, i.e each zooming or panning operation in either panel is performed on the other two panels at the same time and in the same way (see "Linking Panels," p. 54).

Comparison results can only be viewed, but not saved, rated, or labeled. And of course, there is no metadata for the comparison result to be displayed.

To get rid of the comparison result and possibly restore the preview image that was displayed previously in that panel, select the compare image, then open the context menu (with $mathbb{H}$ the right mouse button / **Control** key + mouse) and select **Reset Compare Panel**.

Repurposing Assets

Cumulus provides several ways for you to repurpose your cataloged assets. The following sections describe how you can do this making use of Cumulus Converter module.

Converting Image Assets

The Pixel Image Converter enables you to convert any cataloged pixel image into the different formats on the fly, e.g. JPEG, TIFF, BMP, GIF, ScitexCT, PNG, PCX, and PDF. It also lets you resize the image and convert it into another color space.

With Cumulus, the images can also be cropped, rotated or flipped, Sharpen and Blur filters can be applied for the image processing. The sequence of the conver-

sion processes is cropping first, then resizing and after that applying a filter. Finally the image is saved in the specified color space and output format. To convert image assets into another format:



- 1. Select the record(s) representing the image asset(s) to be converted.
- 2. Select **Asset > Convert To** menu command.

The Browse for Folder dialog opens for choosing a destination for the converted asset.

3. Select the folder and click **Open** / **Open** / **OK**.

A dialog opens for choosing the converter. The dialog lists the Asset Processors available to you. Available to you for converting are the Asset Processors that are activated in the Asset Handling Set which is chosen for Asset Access in your User Settings.

- 4. Select **Pixel Image Converter** as Asset Converter.
 - The Pixel Image Converter Parameter dialog opens.
- 5. Choose your settings. For details, see "Pixel Image Converter Parameters," p. 59.
- 6. Click **OK**.

The selected image asset(s) will be converted and the resulting images will be stored in the selected destination.

Pixel Image Converter Parameters

For the conversion you can define parameters referring to:

- Image Size
- Image Processing
- Output Format

Image Size

You can not only determine the image size (in pixel as well as inches, cm or percent). You can also have the image cropped before it is scaled to the dimension defined by width and height.

Alternate Source Resolution

If you want to use the image with a resolution different from the stored original, activate the **User Alternate Source Resolution** option.

Crop Area

Cropping refers to cutting down an image by cutting away unwanted parts at the edges. You specify left, top, right, bottom margins to be cropped off the source image.

The cropping function can be used to trim the edges of an image. Enter the size of the edges to be removed. Define the measurement under **Units**.

NOTE: If you use an alternate source resolution, be aware that this resolution is the basis for any cropping in inches or cm measurements.

Scale Dimension

The values for width, height and resolution determine the size of the converted image. The image size can be specified in pixel dimensions or print dimensions. And you can decide to have the image converted either to an individual size or to a fixed size, the maximum of which is defined by a bounding box. The result depends on the selections set for the conversion:

· Work at

If you want to specify the size in inches or cm and have the software calcu-

lating the pixel dimension automatically depending on the set resolution, select **Document Size**. If this option is activated, the entered values determine the print dimensions.

If you want to specify the pixel dimension (not caring about print size), select **Image Size**.

Note that the final output size depends on the output device's settings (e.g. dpi of printer).

TIP:

Working at Image Size is useful when preparing images for online distribution. Keep in mind that changing pixel dimensions affects not only the size of an image on-screen but also its image quality and its printed characteristics – either its printed dimensions or its image resolution.

· Constrain Proportions

To maintain the current proportions of width to height, activate this option. (This option is not available if you have selected multiple records for converting or if you are defining a Cumulus Action.)

TIP:

To keep the proportions if you have selected multiple records or if you are defining a Cumulus Action we recommend you to specify height and width in percent.

· Use Size as Bounding Box

If this option is activated, the size defines the bounding box into which the images has to fit. The image will be resized proportionally to fit the size of the bounding box. No dimension of the converted image will exceed the size of the box. When using this option, the proportions of the images are always constrained and that's why the **Constrain Proportions** option is not available.

If you want images that are smaller than the size of the bounding box to be enlarged to this size, activate the **Enlarge Smaller Images** option.

TIP:

To define the size for a box you want to fit for portrait and landscape images, make it a square. Then the longest edge of an image (height or width) will be resized to the entered value and the shorter edge will be resized according to the proportions of the image.

You can choose different units of measurement. To enter values as percentages of the current dimensions, choose **Percent** as the unit of measurement.

Image Processing

With the conversion the image can be processed. You can have a filter run, rotate and flip the image. Select the desired processing options.

Filter

To have a filter run with the conversion, select a filter type and the radius range for the filter (small, medium, large.) The radius determines how far the filter considers surrounding pixels that affect the filter action. The following filters are available:

Average Blur filter
 Softens an image. It smooths transitions by averaging the color values of surrounding pixels. Eliminates noise where significant color transitions occur in an image.

· Median Filter

Reduces noise in an image by blending the brightness of pixels. The filter adapts the brightness of pixels to the median brightness value of the surrounding pixels.

Gaussian filter

Works similarly to the Blur filter but uses a weighted average of the color values of the surrounding pixels. The weighting is generated using the Gaussian bell-shaped curve that is generated.

TIP:

The Blur as well as the Gaussian filter decreases high-frequency details and can produce a hazy effect.

• Sharpen filter

Increases the visual sharpness of images by increasing the contrast at edges.

TIP:

Applying the Sharpen filter is recommended when scaling up images to keep their visual sharpness as high as possible.

Unsharp Mask Filter

Makes images appear sharper by increasing the contrast of small brightness changes.

· Add Noise Filter

Applies random pixels to an image, simulating distortion or noise. You can also use the Add Noise filter to give a more realistic look to heavily retouched areas.

Rotation

You may rotate the image by selecting image rotation degrees.

- 0 no rotation
- 90 to rotate the image clockwise by a quarter-turn
- 180 to rotate the image by a half-turn
- 270 to rotate the image counterclockwise by a guarter-turn.

• Flip

- activate **horizontal** to flip the image along the vertical axis.
- activate **vertical** to flip the image along the horizontal axis.

Output Format

For the output you can define the following parameters:

Color Space

Select the desired color space for the converted image. The available color spaces depend on the selected file format (e.g. GIF, PNG, PCX, and BMP do not support CMYK.)

NOTE: ICC Profile Embedded

The ICC profile of an original image will be embedded in the converted asset if the color space is not changed and the output file format supports ICC profiles.

File Format

Select the file format for the converted image. Depending on the selected file format, the available further parameters for the output format may differ.

Compression

Select a compression scheme that is supported for the selected file format. (This version of the Pixel Image Converter provides a compression scheme for TIFF only.)

· Quality (JPEG)

For JPEG and PDF files only, select the desired quality.

Store IPTC Information

To store IPTC metadata within TIFF and JPEG images, activate this option.

Store XMP Information

To store XMP metadata within TIFF, JPEG, PNG, and PDF files, activate this option.

The selected asset(s) will be converted and stored under the name of the original asset in the selected destination. The Pixel Image Converter will automatically add the correct $\[\phi \]$ File Type and Creator $\[/ \]$ file extension to the file name. The name will be extended by a number if a file with that name already exits at the selected destination.

Watermarking Assets

With the ever increasing number of digital assets, digital watermarking has become an important topic. Watermarking helps you to protect your intellectual properties. Protect your images by adding watermarks.

Digital watermarking is a technology for embedding information into digital assets. In general, information for protecting copyrights is embedded as a watermark. A watermarked image can prove its origin, thereby protecting copyright. A watermark also discourages the making of illegal copies.

BACKGROUND INFORMATION:

Watermarking can serve many different purposes from tamper proofing to authentication. Three major aspects in the protection of digital assets have been pointed out, each of them with different requirements: first copyright protection, protecting ownership and usage rights; secondly tamper-proofing, aiming at checking document integrity; and thirdly authentication, the purpose of which is to check the authenticity of a document. While robust watermarks are typically used for copyright protection, fragile or semi-fragile watermarks are proposed to ensure tamper proofing and authentication.

For embedding watermarks, Cumulus provides the Watermark AssetProcessor. It enables you to embed visible watermarks into following pixel image formats: JPEG, TIFF, BMP, GIF, PNG, and PCX. It creates a copy of a cataloged asset with the digital watermark embedded.

Watermarking Parameters

You can provide both an image and text for your watermark. The position of the text can be set in the properties. You can provide just the image or just the text. Or a combination of the two.

Visible Image

As a watermark image you can use most common pixel image formats, e.g. JPEG, PNG, and TIF. If an animated image file is supplied, the first frame will be used as the watermark image. You can either type in or browse to find the watermark image file.

You define the opacity of the watermark from 0 to 100. If you set the opacity to 0, the watermark image will be totally transparent and you will not be able to see it. If you set it to 50, the watermark will be semi-transparent. The watermark will be completely opaque (solid) if the opacity level is set to 100.

Under **Image Position**, you define the area where the watermark image should be placed. The position of the watermark image within the resulting image is defined by anchor points.

You can control the size of the watermark image by scaling it. When scaling, proportions are constrained, and the images will be scaled to provide the maximum overlay. Small watermark images will be enlarged and large ones will be made smaller. You can also define to have only small images enlarged. Following scaling options are available:

- At long edge The watermark image is scaled at its long edge. The long edge will be scaled to fit the source image and with proportions constrained the short edge will be scaled accordingly.
- At short edge The watermark image is scaled at its short edge. The short edge will be scaled to fit the source image and with proportions constrained the long edge will be scaled accordingly.
- **Fit to image size** The watermark image is scaled to fit the size of the image, depending on the image orientation (portrait or landscape).
- Scale up only A watermark image that is smaller than the source image is enlarged to provide the maximum overlay. Proportions are constrained.

NOTE: If you do not activate the scale option, watermark images larger than the source image will be cropped.

The **Previously selected image** field will display an image only if the watermarking parameters are defined for an Asset Action. Then the watermarking image will be provided by the Cumulus Server and the field displays a preview of the image that was transferred by the Cumulus Server.

Visible Text

The visible text can be entered by you and/or taken from a Cumulusrecord field. Using a record field enables you to have individual watermarks when batch processing images.

To include a record value as text, select the desired field from the **Record field** drop-down list and click **Append**. The corresponding placeholder entry will be inserted at the end of the **Content** field.

You are allowed to enter multiple lines of text in the **Content** field. Enter \n for carriage return. You can also type special characters (like \n , \n , etc.). They will be rendered properly in the processed images.

You can control the position of the text. You can specify the Horizontal Position (Left, Center, and Right) and Vertical Position (Top, Middle, and Bottom) of the text.

You define the opacity of the watermark from 0 to 100. If you set the opacity to 0, the watermark will be totally transparent and you will not be able to see it. If you set it to 50, the watermark will be semi-transparent. The watermark will be completely opaque (solid) if the opacity level is set to 100.

You can choose the font, style, size and color of the text. To have the text fit best to the image size independently of the font size setting, activate the **Fit text to image size** option.

Under **Text Position**, you define the area where the watermark text should be placed. The position of the text within the resulting image is defined by anchor points.

Employing Custom Record Fields

The drop-down list for selecting a record field displays the Cumulus standard fields only. If you want to include a custom field, you must enter the GUID (Glob-

ally Unique Identifier) of the field into the **Content** field of the Watermark Assset-Processor Parameter dialog.

To find out the GUID open the Properties of the field (Cumulus / Electical Edit > Preferences > Catalog Settings) and on the General tab double-click the field name of the field Name.

This copies the GUID to the clipboard and you can paste it. A Cumulus GUID is composed of exactly 38 characters and looks like this:

{af4b2e12-5f6a-11d2-8f20-0000c0e166dc}

Embedding Watermarks into Image Assets

You embed watermarks into image assets by employing the Convert menu command or by including the Watermark AssetProcessor in a Cumulus Asset Action. (For information on how to include an Asset Processor in an Asset Action, see "Cumulus Asset Actions," p. 124.)

To watermark image assets via the Convert menu command:



- 1. Select the record(s) representing the image asset(s) to be watermarked.
- 2. Select Asset > Convert To menu command.

The Browse for Folder dialog opens for choosing a destination folder for the watermarked asset(s).

3. Select the folder and click **Open** / **B** OK.

A dialog opens for choosing the converter. The dialog lists the Asset Processors available to you. Available to you for converting are the Asset Processors that are activated in the Asset Handling Set which is chosen for Asset Access in your User Settings.

4. Select Watermark AssetProcessor as Asset Converter.

The parameter dialog opens.

- 5. Make your settings. For details, see "Watermarking Parameters," p. 62.
- 6. Click OK.

The selected image asset(s) will be converted and the resulting images will be stored in the selected destination.

Creating ZIP Archives

The **ZIP AssetProcessor** compresses assets into Zip archives.

To compress cataloged assets into Zip archives:



- 1. Select the record(s) representing the asset(s) to be compressed.
- 2. Select **Asset > Convert To** menu command.

The Browse for Folder dialog opens for choosing a destination for the ZIP asset.

3. Select the folder and click **Open** / **Open** / **OK**.

A dialog opens for choosing the converter. The dialog lists the Asset Processors available to you. Available to you for converting are the Asset Processors that are activated in the Asset Handling Set which is chosen for Asset Access in your User Settings.

4. Select **ZIP AssetProcessor** as Asset Converter.

The ZIP AssetProcessor Parameter dialog opens.

5. Select the parameters for the conversion:

• Under **Archive Name** you have to choose a name for your ZIP asset. The ZIP AssetProcessor will automatically add the extension ".zip" to the file name. On Mac OS this means that the name can be up to 27 characters in length without the extension.

NOTE: If you choose an existing ZIP asset as archive name, the ZIP AssetProcessor will update the already contained assets and append new assets

- Under Use Character Encoding you can define the character encoding used to save the file name(s) in the ZIP file. The default is your local system encoding the encoding of the computer you are working with (this encoding would be used by WinZip and Stufflt also). The character encoding chosen should account for the language and the operating system of the computer where the ZIP is to be unpacked. Find some common encoding recommendations listed below.
 - Windows and West European languages: WinLatin1
 - Windows and East European languages: WinLatin2
 - Windows and 2 byte character encoding (e.g. Japanese): WinJapanese
 - Mac OS X: UTF8
 - Mac OS 9 and West European languages: MacRoman
 - Mac OS 9 and 2 byte character encoding (e.g. Japanese): MacJapanese
 - Mac OS 9 and Russian: MacRussian
 - UNIX: Ask the person you will provide the ZIP archive with, which encoding is needed.
- Under Macintosh Resource Support you can define how to support Macintosh resources.
 - Activating the **Store as MacBinary Format** option determines the assets to be stored including the Mac OS resource fork, data fork and finder information (e.g. File Type/Creator). This option should only be activated, if the file will definitely be extracted under Mac OS, as the MacBinary format often cannot be extracted properly under Windows or UNIX.
 - Activating the **Store as Mac OS X archive compatible** option saves the files in the same structure as in an archive created with the Finder of Mac OS X (10.3 or later).

NOTE: If you have activated the Macintosh Resource Support with the option Store as Mac OS X archive compatible, the character encoding is always UTF-8.

6. Click OK.

The selected asset(s) will be compressed and the ZIP asset stored in the selected destination.

WebAlbum

Cumulus WebAlbum enables Cumulus to output selected images' records as a Web-ready album. This album is based on static HTML pages, complete with thumbnails, scaled versions of images and links to the original assets. You can use different skins for the layout and functionality of your album, such as those provided by Canto or other providers (e.g. by JAlbum), or those you develop yourself. WebAlbum takes the selected records and converts their assets to files suitable for display on the Web. This includes the automatic creation of copies of the assets in the Web-ready JPEG image file format. You have full control of album design through the use of skins. WebAlbum will create thumbnails of your images and display them in index pages in HTML. WebAlbum can also produce slide shows of your images for easy navigation.

An album created with Cumulus WebAlbum can be uploaded on any common Web server (no special system requirements) and can be viewed with any standard Web browser. You can also use WebAlbum to create local albums on your hard disk or on CD-ROM.

If you are looking for more features for your album uploaded on the Web than Cumulus WebAlbum provides (e.g. search functions, non-static pages, e-commerce), then have a look at the Cumulus Internet solutions that Canto provides. For details on all of Canto's Digital Asset Management products and services go to: www.canto.com

Creating an Album

When you create an album, WebAlbum uses the records you selected and:

- generates thumbnails in JPEG format (e.g. used for index pages) always
- generates scaled images in JPEG format (e.g. used for slide pages) if a corresponding option is activated
- copies the original assets to a defined output folder for the upload if a corresponding option is activated

Furthermore WebAlbum generates:

- index page(s) always
- slide pages if a corresponding option is activated. Depending on the activated option, slides contain selected record fields' information and scaled images or original assets.

To create an album:



- 1. Select the records of those images you want your album to consist of.
- 2. Select Asset > Create WebAlbum.

A dialog for configuring your album opens. Now you can either configure a new layout for your album or use a saved one by clicking the (Open) button.

3. Configure the album.

Three sections provide access to the configuration options:

The General Section

- **Title**: Enter a title for your album. Where this title is displayed depends on the selected skin.
- Output Location: Define the folder to hold the output of your configured album. This should be an empty folder when you start creating a new album
- Output Options:

Make Slides – Enable this option, if you want your album to include slides (scaled images and contents of the selected record fields). If the selected skin supports these functions, next/previous buttons are provided to display the slides.

Upload via FTP – Enable this option if you want your album to be uploaded onto the Web directly after creation.

NOTE: This option can only be enabled if the settings on the FTP tab were tested and did not show any errors.

• Link Options: Decide on one of the options (for further information on these options, see the section "Provided Skins and Link/Output Options", below.)

Link to Originals – Clicking on a thumbnail will display the original asset. Link to Originals through Scaled Images – Clicking on a thumbnail will dis-

play the slide including the scaled image and clicking on this image will display the original.

NOTE: Albums that include links to the original are quite large in size.

Link to Scaled Images Only – Clicking on a thumbnail will display the scaled image without any further link to the original.

• Image Size & Quality

Thumbnails – Select or enter the size for the thumbnails (left field) and select the compression quality (right field).

Images – Select or enter the size for the scaled images (left field) and select the compression quality (right field).

NOTE: *Images will maintain aspect ratio and constrain their proportions*

- Page Layout (valid only if the skin interprets these values)
 Columns Enter the number of columns for the index page(s).
 Rows Enter the number of rows for the index page(s).
- Image Order: Select the record field you want used for alphabetical sorting of the thumbnails.

Reverse Sorting Order – If this options is enabled the sorting order is Z to A or 9 to 0 $\,$

Skin

Name – Select the skin you want to use for this album. The selected skin defines the overall appearance of your album: layout and functionality. Style – Select a style (e.g. color theme and look) for the above selected skin. Automatically load Skin Settings – Enable this option, if you want the selected skin's layout hints to be loaded automatically (valid only if there are any hints provided with the selected skin).

The Fields Section

Use the **Add** button to add the fields of the contents you want to include with the slides.

Use the arrow buttons to place the fields in order.

The FTP Section

FTP Settings

FTP Server – Enter the name of the FTP server you want to upload the album to.

Port – If it is not the standard FTP port number 21, enter the required port number of the FTP server you want to upload the album to.

User Name – Enter the user name of the FTP account.

Password – Enter the password of the FTP account.

Path – Enter the directory on the FTP server you want to upload the album to. Enter at least a slash (/) but be aware that an existing index.html will be overwritten.

Passive Mode – Enable this option if you expect any trouble when connecting through a firewall.

Overwrite Existing Files – If this option is enabled, existing files will be overwritten when uploading a new album. If not enabled, existing files will not be overwritten with the new version.

To test your FTP settings you can click the **Test Settings** button. Only in cases where the settings do not include any errors, you can enable the **Upload via FTP** option on the **General** tab.

4. Click **Start** to create your album.

If you have changed any setting of the album layout or if it is a new album layout, you are asked whether you want to save your changes. If it is a new album layout you want to save, you are asked to enter a name for it.

If the folder you defined under **Output Location** contains any files, you are asked whether this folder should be cleared. We recommend selecting **Yes**. If you select **Yes**, all files and subfolders in the output folder will be deleted before the new output files are created. If you select **No**, HTML files with the same names as the newly created ones will be overwritten and new copies of the assets will be added. If you select **Cancel**, the creation of your new album will be canceled.

The output files of your album are created in the folder you defined under **Output Location**. Start the **index.html** page in that folder to see (and test) your album.

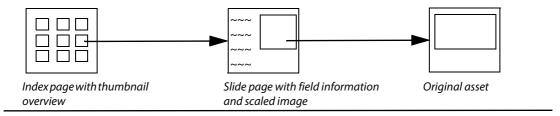
You can save your album layout configuration by clicking the 🔲 (Save) button. If you want to save it under another name, click the 📦 (Save As) button.

NOTE: You may select records of any file formats to create an album – not only images. However, in this case you should not include slides but use links that point directly to the originals.

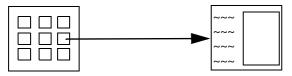
Provided Skins and Link/Output Options

The album design is controlled by skins. Canto provides different skins for Cumulus WebAlbum. The skin named "Canto" supports the following output depending on the selected link and output options:

Link Option "Link to Originals through Scaled Images" (Output Option "Make Slides" ignored)



Link Option "Link to Originals" (Output Option "Make Slides" activated)



Index page with thumbnail overview

Slide page with field information and original asset

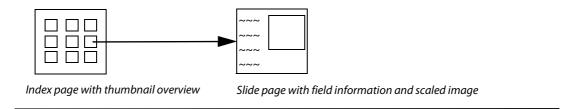
Link Option "Link to Originals" (Output Option "Make Slides" not acti-



Index page with thumbnail overview

Original asset

Link Option: "Link to Scaled Images Only" (Output Option "Make Slides" activated)



Link Option "Link to Scaled Images Only" (Output Option "Make Slides" not activated)



Preferences

Within the Preferences dialog of your Cumulus application, you can define the startup settings for WebAlbum. WebAlbum can either be started with a new and empty album layout or with the last album layout you used.

To set WebAlbum to open the last album layout used when starting:



- Select ← Cumulus / ☐ Edit > Preferences. The Preferences dialog window opens.
- 2. Select **User Settings** and click **WebAlbum** on the General tab.
- 3. Enable the checkbox.
- 4. Click **Apply** to save your changes and select the next preference you want to edit.

OR

Click **OK** to save your changes and close the Preferences window.

Customize

You can easily customize your album by using different skins. You can either develop your own skins or use skins created by other providers. Check Canto's website (Products & Services > EJaPs > EJaP Exchange Forum) from time to time to see if new skins have been developed that you could use.

A skin consists of a folder that contains subfolders for images included in the skin itself (the **res** folder) and cascading style sheets (the **styles** folder) as well as files that define special pages, e.g. the index pages and the slide pages. The **About** text file will inform you if the skin contains any extraordinary functions or definitions.

The skins provided with Canto can be found in the **skins** folder inside the **webalbum** folder. The **webalbum** folder is located in the **ejp** folder in your Canto installation folder.

It is easy to customize the fonts (type, size and color) and the background colors of a skin by editing the cascading style sheet (.css). If you want to develop your own skins, you have to know how to do it on your own. Canto cannot give you any support for developing skins.

TIP: Cumulus WebAlbum and JAlbum

You may use JAlbum skins with Cumulus WebAlbum. If you want to use JAlbum skins, you have to replace </ja: and <ja: with </wa: and <wa: in the index.htt and slide.htt files. Then test the skin. The following skins seem to work with Cumulus WebAlbum: Mamba, Film, XP, and CameraGeek.

You may look at the JAlbum skin repository site, the site that is intended to act as a central area where makers of skins for JAlbum can share their skins with others: http://jrepository.engblom.org
However, note that Cumulus WebAlbum does not support all JAlbum skin possibilities.

Importing and Exporting

Cumulus can export and import records, categories and collections. Collections can only be imported and exported in Cumulus exchange file formats whereas records and categories can also be exported to and imported from XML files. Exported catalog metadata in XML files can be used by other programs as well as on other platforms. Paired with the metadata import options Cumulus offers, you have a complete metadata "round-tripping" solution to make integrations with your other systems easy.

Cumulus supports XSL Transformations (XSLT). XSLT is a programming language for transforming XML documents into other XML documents. XSLT was designed to be used with XSL, which is a stylesheet language for XML. With the Cumulus export function XSLT can be used for example to place images and metadata in InDesign documents.

Importing and exporting data with Cumulus is easy, but there are a few things to be aware of in order to avoid unexpected results, which are explained below.

Cumulus Exchange File Formats

XML is the recommened export format. But for special purposes Cumulus can also export and import records, categories and collections in special Cumulus exchange file formats. These files can be used on any supported Cumulus platform. But note that records and categories do not support the Cumulus 8 Table fields. Canto recommends you use these formats only for special purposes concerning Cumulus versions prior to 8. The Cumulus exchange file formats are:

- Categories Cumulus exports categories in a Cumulus Category Exchange File. The file name extension is .cce
- Records Cumulus exports records in a Cumulus Record Exchange File. The file name extension is .cre
- Collections Cumulus exports collections in a Cumulus Collection Exchange File. The file name extension is .cfe

Exporting data in this format can be used for transferring data between catalogs for archiving category listings. These archive files can be imported into any other catalog when you need them. (You could do the same thing with records, but it's probably more convenient just to keep copies of the records in catalogs.)

Character Encoding for Export

When exporting information in Cumulus exchange file formats, you can employ different character encoding. You should base your decision on how the exported file is to be used. Universal Encoding (UTF-8: Unicode characters coded as 8-Bit Transformation Form) makes sure that special characters are transferred correctly across platforms. Choose this format only if you want to use the exported file on another operating system.

Maintaining Category Assignments

The most important thing to know when you are exporting records to be imported into another catalog, is whether the new catalog already has the categories to which the records are assigned. If it does not, the categories assigned to the imported records will be created. But categories of the type "Folder" lose their type (assignment to the Source tab). They are created as normal categories. If you want to keep the type of these categories, you must first export and import the categories.

Remember that it may be easier just to drag and drop records from one catalog to another, if both the source and destination catalogs are available to you. If they are not, or you are moving thousands of records at a time, then the export/import route is the way to go.

Exporting and Importing Records and Categories

The exporting and importing process is pretty much the same, regardless of the data type. Exporting goes like this:



- 1. Find and select the items you wish to export. (See "Searching," p. 32, if needed, for a refresher on how to find records.)
- 2. Select **File > Export** and then the appropriate export option:
 - Selected Records Exports the currently selected records. (This menu item is disabled if no records are selected.)
 - All Records Exports all records of the active collection. If you want to
 export all records of the catalog(s) included in the collection, you have to
 perform Find > Find All Records first.
 - Selected Categories Exports the currently selected categories in the active collection. (This menu item is disabled if no categories are selected.)
 - All Categories Exports all categories of the Category pane.
- 3. Select the export format. Note that the XML format is recommended for most purposes. This format enables Cumulus to export from multiple catalogs and supports data from Cumulus Table fields.
 - When exporting records into an XML file, a check box offers the option to have the export file compressed (*.zxml). Another check box offers to enable XSL transformation by applying an XSLT stylesheet which describes the rules for the transformation.
 - When exporting selected categories, a check box offers the option to export the subcategories as well.
- 4. Click the ___ button for browsing for the location where the export file should be saved.
- 5. Select the location, name the export file and click **Save**. Note that Cumulus will add the correct file extension.
- 6. Click **Next.** If you are exporting into XML, you can select the fields that contain the values to be included in the export file.

- 7. Make your selections and click **Start**. Messages inform you of the export process
- 8. When you get the message that the process is finished, click **Finish** to close the dialog.

Importing is just as easy:



- 1. Select File > Import.
- 2. If you have multiple catalogs open in one window, select the catalog to which you want to import the data.
- 3. Click the ___ button for browsing to the location where the file to be imported resides.
- 4. Select the file and click OK.
- 5. Select the appropriate file format. Note that the XML format will also work for zipped XML files (*.zxml).

NOTE: Importing Categories

If a category in the import file has the same name as an existing category at the same hierarchy level, the category is not imported.

- 6. Click **Next** to start the import. Messages inform you of the import process.
- 7. When you get the message that the process is complete, click **Finish** to close the dialog.

Importing and Exporting Collections

Collections stored with previous Cumulus versions on the computer running the Client application can be imported (File > Import > Collections.) To store collections at any location other than the Cumulus Server, you can use the export function (File > Export > Collections.)

For sending a collection via email to another user, a special export function is provided (File > Export > Mail Collection To.) With Cumulus 6.x this function was provided under Collection > Mail To. However, don't forget: Since a collection is always connected to catalog(s), it is necessary for the recipient to have access to the catalog(s) 'serving' the collection.

To make use of a collection you received, you use the import function.

Importing from Text/CSV Files

The Cumulus Importer utility enables the import of metadata from other database systems into Cumulus catalogs. The metadata can be imported from text files (separated by delimiters.) You can assign the information to Cumulus fields. The data can be imported into record or category fields, into string list fields as values, or into the category tree, which enables the Importer to create hierarchical categories. The configuration for an import process can be saved as an Import Configuration Set.

There are different types of import destinations available with the Cumulus Importer:

Import of Categories into the Category Tree

You can import data from an import file as categories to a Cumulus catalog. You specify the field of the import file which data is to be imported as categories. And you specify the hierarchy level where they shall be inserted.

Import of Metadata into Record Fields

You can import data from an import file into record fields of a Cumulus catalog. You define relations between a record field and a field of the import file. Furthermore, you can create new records (records that are not related to assets) for entries in the import file that do not correspond to already existing records in the current catalog.

Import of Metadata into Category Fields (Enterprise only)

You can import data from an import file into category fields of a Cumulus catalog. You define relations between a category field and the field of the import file. The procedure is identical to the procedure necessary when importing information into record fields. Furthermore, you can create new categories for entries in the import file that do not correspond to already existing categories in the current catalog.

· Import of Values to String List Fields

You can import data from an import file as values into the properties of a string list field. The values can be imported to any category or record field of the type String List. It is not necessary that the newly created list entries are assigned to records.

Delimiters

A lot of database systems use the tabulator as the field delimiter (even Cumulus while exporting data from a catalog). If your import text file uses another character as field separator, you can choose or enter another delimiter. Also, the delimiter for category levels can be set to any character.

Definition of Additional Information

For the import you can define additional information that is imported prior to the text that comes from the import file. The additional information may increase the readability of information in a field

EXAMPLE: Additional Text

If you import a lot of different data into the same text field, it might be helpful to define additional text that is imported prior to the information from the import file. For example, if you want to import the price of a product into the notes field and your import file contains the figures only, you can define additional information like **Price Euro:** that is added to the text before importing it into the Cumulus catalog. After the import the notes field looks like this: **Price Euro:** 99

Running an Import Process from a Text File

IMPORTANT! Before you start importing information into a Cumulus catalog using the Cumulus Importer utility, you should make a safety copy. Make sure a current safety copy of the catalog exists before you go ahead and change the metadata in the catalog. There is no UNDO function for the import available. You can only go back to the initial version of the catalog if there is safety copy available that you can open instead of the changed catalog.

To set up an Import Configuration Set and run an import process:



- 1. Open the Cumulus catalog, to which you want to import the information.
- 2. Select File > Import > From Text/CSV File. This opens a dialog that leads you through the steps required.

3. Choose whether you want to create a new set or load an existing one. To select an existing one, open the list with the arrow down button. This lists all sets that are available for you.

4. Click Next.

5. If you decided to load an existing set, go on reading with step 7.

If you are creating a new set, a dialog opens to choose the type of import destination – where you want to put the data.

For information on the different types see above.

6. Select the destination and click **Next**.

This dialog lets you select the file you want to import from, choose the appropriate delimiter and the encoding of the import file.

7. Determine the import file, the delimiter its data contains and its encoding. You can see how the text is affected in the **Data Preview** below.

• File

Choose the file you want to import the data from. Use the <u>u</u> button to browse for the file.

Delimiter

A lot of database systems use the tabulator as the field delimiter (even Cumulus while exporting data from a catalog). If your import file uses another character as separator, you can choose or enter another delimiter.

Character Encoding

Select the character encoding of the import file.

Import Field Indentifier

Lists the field indentifiers from the chosen import file as interpreted using the defined delimiter.

Import Field Value

Displays what the values of a field will look like. Use the arrow buttons to page through the data.

8. If this is how you want to import the data, click **Next**.

The next steps depend on the selected destination type.

See below for further information. In any case you, have to add entries for the fields to be imported. Use the **Add** button to do so. Use the **Remove** button to remove entries for fields.

If no more configurations are required, a **Start** button is displayed.

NOTE: Now you can save your Import Configuration set for the data import in an import scheme file by clicking the **Save as** button. This set holds information about the field assignments, the name of the import file and the appropriate delimiters.

9. Click **Start**. The data will be imported.

Import to Category Tree

If you want to import data as categories to the Category Tree of a Cumulus catalog, you must specify the import field which holds the data to be imported as categories and the hierarchy level where you want the categories to be inserted.

Delimiter for Category Hierarchy

What delimiter separates your category levels? By default, Cumulus uses a colon as separator for indicating the levels in the category hierarchy. If your import file uses a different character, enter the appropriate delimiter.

Skip First Line

Often the first line of the import file does not contain information that you

want to import. You can disable the import of the data of the first line by activating the **Skip First Line** option.

Import Field Pattern Preview

Displays how the data will be imported.

Parent Category

Displays the category to which the data from the import field will go as subcategories. See below on how to define the parent categories.

Import Field Pattern

Lists the fields from which the values should be imported as categories. You can insert additional information by clicking in the field's entry in this column. If you want to import data from more than one field, use a right/alternate mouse click in a field's entry in this column to get a list for selecting additional fields.

To add field entries, click the **Add** button. This displays a dialog that lets you:

- Determine a parent category. You can import the categories as subcategories of a specific category. Determine this category either by entering the category hierarchy data for the parent category or by using the currently selected category in the category pane. When entering the category hierarchy data you must use the displayed delimiter.
- Select the field that contains the values to be imported as categories

The **Import Field Value** column displays how the data will be imported. Use the arrow buttons to page through the data.

To have your selected field added to the selection of Import Fields, click **OK**. This brings you back to the main dialog.

Import to Records/Categories

If you want to import data into a record field of the Cumulus catalog, you have to define a relation between the import text file and the Cumulus catalog by specifying one or more relations. In most cases, it will be the Asset Name to determine the record and in addition to that multiple relations that determine from which import field the data should be imported to which Cumulus field.)

NOTE: You can assign fields of the import file to the Cumulus record field **Categories**. Then the affected Cumulus records will be assigned to these categories

If you want to import information into category fields of the Cumulus catalog, you have to define a relation between a category field and the field of the import file. The procedure is identical to the procedure necessary when importing information into record fields.

· Skip First Line

Often the first line of the import file does not contain information that you want to import (e.g., column titles). You can disable the import of the data of the first line by activating the **Skip First Line** option.

• Create new records/categories for lines that do not correspond to existing records/categories.

Activating this option initiates the creation of a new record (without a related asset) or a new category for each line in the import file that does not correspond to an already existing record/category.

· Import Field Pattern Preview

Displays how the data will be imported.

Import Field Pattern

Lists the fields from which the values should be imported. You can insert additional information by clicking in the field's entry in this column. If you want to import data from more than one field, use a right/alternate

mouse click in the field's entry in this column to get a list for selecting additional fields.

Relation

If you want to import data into a record or category field of the Cumulus catalog, you have to specify relations between the field of the import file and the Cumulus field.

Two different relation types can be specified

- = (equals) The Cumulus Importer will only import the data if the value of the Cumulus field is equal to the value of the Import Field. This relation type is used to perform the search for the appropriate records.
- -> (insert) The Cumulus Importer will import the data of the Import field specified in the left hand column to the Cumulus field specified in the right hand column.

NOTE: If you import data without identifying corresponding records by a = (equals) relation, the Cumulus Importer utility will create new records that are not assigned to any assets. You may do so if, for example, you want to import metadata for assets that are not cataloged yet. The corresponding assets may be assigned to the records later.

Cumulus Field

Lists the Cumulus Fields into which the data of the import field shall be imported. As soon as a new Import Field entry is added, the field's entry in this column is filled with the first field of the list of available Cumulus Fields (record or category field – depending on the destination type you have chosen for the Import Configuration set.) Click in the field's entry in this column to select the desired Cumulus Field.

Fill Mode

Displays how the field will be filled. For String fields, you can define whether you want the imported values to replace the existing value or to be added to the existing text (before or after.) Click in the field's entry in this column to select the desired mode

Only if you are importing data to the Categories field of records (to assign records to categories), you must determine the delimiter that is used to separate the category levels.

To add field entries, click the **Add** button. This displays a dialog that lets you select the field that contains the metadata to be imported.

The **Import Field Value** column displays how the data will be imported. Use the arrow buttons to page through the data.

To have your selected field added to the selection of Import Fields, click **OK**. This brings you back to the main dialog.

Import to String List Fields

If you want to import data as values of a String List field of the Cumulus catalog, you have to specify the assignments between the import fields and the Cumulus String List fields.

Skip First Line

Often the first line of the import file does not contain information that you want to import. You can disable the import of the data of the first line by activating the **Skip First Line** option.

· Import Field Pattern Preview

Displays how the data will be imported.

· Import Field Pattern

Lists the fields from which the values should be imported. You can insert additional information by clicking in a field's entry in this column. If you want to import data from more than one field, use a right/alternate

mouse click in a field's entry in this column to get a list for selecting additional fields.

Cumulus Field

Lists the Cumulus Fields into which the data of the import field shall be imported. As soon as a new Import Field entry is added, the field's entry in this column is filled with the first field of the list of available Cumulus Fields. Click in the field's entry in this column to select the desired Cumulus Field.

To add field entries, click the **Add** button. This displays a dialog that lets you select a field that contains the values to be imported.

The **Import Field Value** column displays how the data will be imported. Use the arrow buttons to page through the data.

To have your selected field added to the selection of Import Fields, click **OK**. This brings you back to the main dialog.

Workflow Enhancements

Cumulus provides several possibilities to enhance your workflow. The next section describes how to use color labels and star ratings to quickly organize, sort, and filter your files.

Labeling

The record field type **Label** enables users to label records by assigning colors. Each Cumulus catalog provides a standard Label field but the user can add more fields of this type. For any field of this type the user can define a color range. The Label Editor tab of this field type's properties window lets you determine the label colors. Additional colors can be defined by a color picker value.

Label fields can be displayed in all views. For certain views you can select the colors of a specific label field to be the background of the entire record or of the record's name.

Of course a label field itself can also be included in a view. To set up views that display labeling: **(Cumulus / Elit > Preferences > Record View Sets.)**

The labeling color for a record can be set in the Information window via list selection or by a menu item via the Asset menu.

The menu item **Assign Label** will be available only if the effects of assigning the label can be immediately seen by the user. This means that it is available only if at least one label field is included in the catalog AND if at least one label field is included in the current view or set as background for records (entire record or record name) in the current view.

The menu item will assign the label set as background of the current view. If no label is set as background or for views where a label cannot be set as background, the menu item will assign the label from the first field of type Label from the current view. (The order refers to the field list of the view settings in the Preferences dialog.)

In the Information window, the field will be displayed as a drop-down list. The current color is displayed and the available colors are included in the hidden list. To select a color, open the list and select the desired label color. To remove a label, open the list and select the **no value** entry.

When printing labeled records, the label marks are printed as displayed (if the Label field is included in the fields to be printed.)

NOTE: Multiple Labeling Systems!

Each catalog can have its individual labeling system. However, be careful using multiple labeling systems. If you work with several catalogs in one collection, you might not like to have different colors caused by individual labeling systems for the different catalogs. Label fields with the same name included in multiple catalogs but with their colors defined differently might cause confusion. The records will always show the label colors set for the catalog they derive from. But if you have multiple records selected that come from different catalogs with different labeling systems the Assign Label menu item is of course disabled.

You can search for labeled records and save such searches as search queries.

NOTE: Changing Label Color

Each label's value is defined by the label color. So, if you change a label color, make sure any saved queries that refer to the label are updated to use the new color value.

Rating Assets

The rating system enables you (and your co-workers) to rate assets from 1 to 5. Rating values are searchable, so when you want to find your best assets, it's easy to do so. Each Cumulus catalog provides a standard Rating field (field name and type: Rating) but more fields of this type can be added.

Ratings are displayed by star icons. A rating field can be displayed in Details View, Thumbnail View, Info View and in the Information window. The rating value for a record can be set in the Information window via clicking or by a menu item via the Metadata menu. The menu item employs the first field of type Rating from the current view. (The order refers to the field list of the view settings in the Preferences dialog.)

In the Information window, clicking on a star in the rating row sets the rating value immediately to the selected value. Clicking close left of the first star removes the value.

When printing rated records, the rating marks are printed as displayed (if the Rating field is included in the fields to be printed).

Managing Related Assets

Cumulus can manage related assets. With Cumulus versions prior to 7 there was no user interface to show this and any relations between assets were defined by program modules only (AssetStore modules or the AXR feature). Since version 7 Cumulus offers enhanced management for related assets by providing a user interface that displays these relations and also enables the user to determine relations between assets.

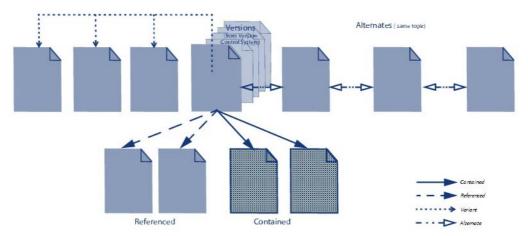
Relationships

Relations can be different, there are hierarchical and flat relations. In a hierarchical relations one is special, it might be the master or the preferred one, it might be the source... The different types of hierarchical relations between assets supported by Cumulus are:

1. Contain – An asset contains other assets: e.g. a Zip archive, a PowerPoint presentation that contains slides, a Quark XPress or PDF document that contains pages.

- 2. References An asset includes references to other assets: e.g. a PowerPoint presentation or a Quark XPress document that includes references to the images on the slides/pages.
- 3. Variants Assets derive from the same source asset: e.g. the PDF of a Word document, an image stored in different file formats or renditions of an image (for example cropped or with a filter employed.)
- 4. Alternates assets that you want to group concerning a certain topic and for which you have a preferred one that you want to represent the others. (For example, you have a series of images on the same topic and the preferred one is the one you decided to use for your current project.)

In addition to hierarchical relations you might want to determine groups of 'equal' assets. Assets that you want to group concerning a certain topic, theme or task but to which you don't want to designate a preferred member. Cumulus offers support for this demand: assign the assets to the same category. However, this well-known way of defining groups is included in the Cumulus management for related assets (referred to as relation type 5).



Different Relations between Assets

How does Cumulus Know about Relations between Assets?

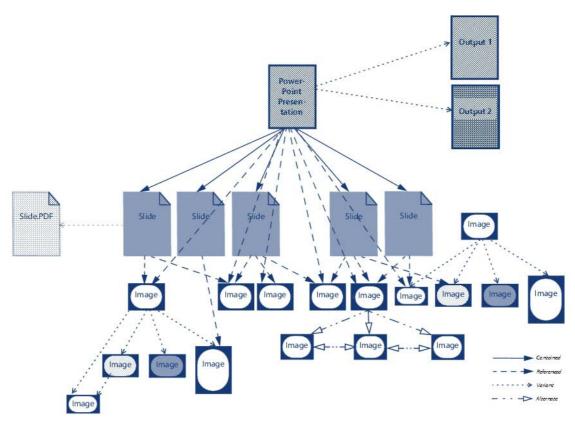
- 1. Contain The Cumulus Asset Storage modules detect if an asset contains other assets when the asset is cataloged.
- 2. References The Cumulus AXR (Asset Cross References) function detects if an asset includes references to other assets when the asset is cataloged.
- 3. Variants The user can determine that an asset derives from a source asset or Cumulus can ascertain that automatically if the deriving asset was created using a Cumulus function.(For a description on how to determine such a relation, see "Assigning Variants," p. 83.)
- 4. Alternates The user can create groups of alternate assets. An asset is determined as an alternate by assigning it to the 'preferred alternate'. (For a description on how to determine such a relation, see "Assigning Alternates," p. 82.)

The information on an asset's relations is stored in the asset's record.

SPECIAL TECH INFORMATION:

The information on an asset's relations is stored in the record fields Related Master Assets and Related Sub Assets. The field Related Sub Assets stores the information which assets are contained, referenced, deriving, or alternates. Whereas the field Related Master Assets stores the information in which other assets the asset is contained in, referenced by, derives from, or which asset is its preferred alternate.

There can be several relations between assets.



Each asset can have various relations.

This example shows a PowerPoint presentation and its relations as well as the relations of assets related to the presentation.

The presentation

- contains slides (pages)
- references images
- is source for variants

Let's try to find out about the different relations between the assets that are related to the presentation:

All slides are contained.

Most slides reference images.

One slide is also source of a variant.

Most images are referenced.

Some images are sources of variants.

A lot of images are variants.

One image is a variant and also the source of another variant. And that's why there is one image that has a variant source as well as a top level variant source.

Last but not least:

One image is a preferred alternate in a group of four alternates.

How does Cumulus Display Relations between Assets?

In a split view: an additional pane can be opened up below the Record pane. The additional pane displays the records that are related to the record selected in the

main Record pane. How the assets of the additional pane are related to the selected record is determined by the display option that is set for the additional pane.

So, having related assets displayed is as easy as: select a record, open up a subpane and select what you want to see in it.

You can select multiple assets in the upper pane and you can open up multiple sub-panes. Each sub-pane will display those assets that are related to the selection in its upper pane. How they are related is determined by the selected display option. If the selection in the upper pane changes, the content of the sub-pane is synchronized. It changes simultaneously.

To open up a new sub-pane: Click the ☐ button of the current sub-pane. To close a sub-pane: Click the ☑ button of the pane. To refresh the display of a sub-pane: Click the ② button of the pane.

TIP: Resizing Panes

You can resize the panes by pressing the ALT / Option key and dragging the split bar. (Just clicking the split bar will resize the main pane and the sub-pane of the dragged split bar only.)

Collapsing: Pressing the ALT / Option key and double-clicking in a pane's statusbar will collapse the pane so that the statusbar only is displayed and the pane above will fill the area. (Just double-clicking lets the pane above remain its size and the main pane will be enlarged.) A double-click on the statusbar of the main pane (topmost pane) will collapse all panes below.

Expanding: Pressing the \triangle ALT / \bigcirc Option key and double-clicking in a collapsed pane's statusbar will expand the pane again – using space from the above pane. (If you just click it – without the \triangle ALT /

• Option key – the pane will be expanded using space from the main window.) A double-click on the statusbar of the collapsed main pane will expand *all* panes below.

Minimizing: Double-clicking a pane's split bar minimizes the pane or resizes it again.

For each pane you can choose the view, the sorting direction and an option for the content to be displayed. How the displayed assets are related to the asset selected in the upper pane is chosen from a menu that offers the following options by default:

RELA- TION TYPE	Display options are:
0	Selected Asset
1	Contained Pages/Slides
	Contained Assets
	Container Asset
2	All Referenced Assets
	Referencing Documents
	Referencing Pages/Slides
3	All Variants
	Variant Source
	Top Level Variant Source
4	– All Alternates
	– Preferred Alternates
5	Assets Assigned to the Same CategoriesAssets Assigned to at least One Same Category

The list options can be renamed, configured and assigned to specific users. The list options are configured via Sub-Pane Filter definitions. So you can customize it in wording and include search strategies for individual tasks. Sub-Pane Filters are created and edited in the Preference dialog window (Cumulus / Edit > Preferences > Sub-Pane Filters.) For details on how to set up a Sub-Pane Filter, see "Sub-Pane Filters," p. 139. The availability of Sub-Pane Filters for users is defined with the User Manager in the each user's properties.

You can get information on the different relations of an asset in the Info view or Asset Info window. If the fields **Related Sub Assets** and **Related Master Assets** are added to the corresponding view settings (and given more than 1 line), for each type of relation a tab is provided that displays the names of the related assets.

What else do you need to know?

In the split view, Cumulus can only display related assets that are cataloged to the same catalog as the one selected. That's why it is recommended that you use a simple collection and not a multi-catalog collection when your work includes the relation aspect.

Assigning Alternates

You can manually group alternates of assets. When you group them as alternates you have to determine one as the preferred alternate.

Select the records of the assets you want to become alternates and select **Metadata > Assign Alternates**. Then a message prompts you to select the preferred alternate. From the selected records select the one you want to be the preferred alternate and click **OK**.

To delete such relations you must delete the corresponding entries in the **Related Sub Assets** and **Related Master Assets** fields from the **Alternates** tab in the Information window or view.

To get the alternates of an asset listed, use the split view and an according list option (Sub-Pane Filter). For more information, see "How does Cumulus Display Relations between Assets?," p. 80.

Assigning Variants

You can manually assign variants to an asset. The asset you assign them to is called the source of the variant.

Select the records of the assets you want to assign as variants to a source asset and select **Metadata** > **Assign Variants**. Then a message prompts you to select the source. Select the record you want to be the one assigned as the source of the variants and click **OK**.

To delete such relations you must delete the corresponding entries in the **Related Sub Assets** and **Related Master Assets** fields from the **Variants** tab in the Information window or view.

To get the variants of an asset listed, use the split view and an according list option (Sub-Pane Filter). For more information, see "How does Cumulus Display Relations between Assets?," p. 80.

Working Smart

Following a few simple guidelines will ensure your workflow is as efficient as possible.

Develop an Effective File Naming Convention

Even though Cumulus makes it easy to keep track of assets with its thumbnail previews and wealth of search options, there is no substitute for a well planned filing system. There will be times when you must access files without the convenience of the Cumulus interface. For example, when writing scripts to enable Cumulus to automate the workflow, a consistent and predictable filing system can not only save many hours of script debugging, but it can also enable functionality that might not otherwise be possible.

How you name your files will depend on how you use them. A news agency may decide to name incoming news stories prefixed with the current date and affixed with the file type:

2003-06-01-ElectionResults.txt 2003-06-01-FlectionResults tif

Using the date in this order lists the files chronologically when sorted alphabetically. It also makes it easier for Cumulus scripts to select files based on a date range.

A Web design group may chose to include an image's file size in its name to make entering HTML size tags more convenient:

MainPageBanner200x50.gif

Or, to use this manual as an example, file names for screen shots of menus and dialogs each begin with either "M_" or "W_" to identify the platform from which the images come. For example, the file name for the Mac OS X File menu is:

M FileMenu.tif

It's Windows counterpart is called:

W_FileMenu.tif

Using the two file name prefixes not only helps differentiate the files at a glance, but also helps to make the filing system more predictable. From this one example, you can probably guess the file names of most images in this document. Consistency and predictability are key to developing a naming convention that will serve you well.

Develop an Effective Folder Naming Convention

Apply an equally clear naming convention to your folder (directory) structures. Cumulus can use your folder hierarchy to create categories when cataloging assets. This is a real time saver if your folder structure helps to identify your assets. Some users may choose to store assets in folders based on file type rather than project name. A sound clip of audience applause, for example, may be used in many projects, but it will always be a sound clip. You can use Cumulus' categories to associate assets with one or more projects.

Cross-Platform Catalog Use

Though the catalogs that Cumulus creates are completely cross-platform compatible, it is up to you to use a catalog file naming convention compatible with each platform on which you plan to use your catalogs.

Keep in mind that catalog *names* and catalog *file names* are two different things. For cross-platform purposes, you need only be concerned with catalog file names. (See "Renaming Catalogs," p. 164, for catalog naming information.) Consult your operating system's documentation for details on the range of characters that can be used. In the meantime, here is one important tip:

Windows uses a backslash (\) to differentiate folder hierarchies. Mac OS X users should avoid using this character in their catalog names. (The Mac OS X uses a colon (:) to differentiate folder hierarchies, but this character is not allowed in file names on either platform, so it is of no real concern.)

Characters that are safe for use on all Cumulus platforms include all upper and lowercase letters, all numbers, the hyphen (-), and the underscore (_).



This chapter covers Cumulus functions that help you with special tasks. It includes descriptions on how to work the URL AssetStore and how Cumulus supports you working with images by providing a special IPTC Information window and maintaining raw image formats of digital cameras.

Specialized Usage

Using URL AssetStore

This chapter covers the basics of working with Cumulus URL AssetStore Module. It describes how to catalog assets from FTP or HTTP servers and how to work with them in Cumulus. Although the records of URL-cataloged assets behave just like any record which has been cataloged through the supported file systems – working with the assets themselves from within Cumulus is slightly different.

This chapter also describes how to copy or move cataloged assets to FTP servers and how to set up the Central Asset Location for a catalog on an FTP server.

Cataloging Assets from FTP or HTTP Servers

If you want to catalog from FTP or HTTP servers or to work with URL-cataloged assets, you must use an Asset Handling Set that has the Asset Storage Module supporting URL activated. If you want an Asset Handling Set to neither work with URL-cataloged assets nor to catalog from FTP or HTTP servers, you may want to deactivate the URL AssetStore Module. For details on how to activate or deactivate an Asset Storage module for an Asset Handling Set, see "(De)activating Asset Handling Modules," p. 118.

There are two ways to catalog assets from FTP or HTTP servers: via menu item and with drag and drop. Let's start with the menu item method. And remember: You need a fully licensed version of the URL AssetStore Module to catalog from FTP or HTTP servers.

NOTE: TAG Files!

Cumulus can create TAG files on an FTP server while cataloging, if the Asset Storage module **Cumulus Metadata Support** is activated for the employed Asset Handling Set and the user, who catalogs, is allowed to save files on this FTP server.

Cataloging Assets via Menu Command

You can catalog employing any valid URL pointing to a file and starting with ftp://or http://. But you may not use *localhost* as IP address. You may even catalog a folder but only if it is on an FTP server.

NOTE: User Authentication

Some FTP or HTTP servers require user authentication. In this case, the host address must be prefixed with a user name and password like "user:password@host". For example, the complete URL then looks like "ftp://smith:secret@server.com/path/file".

To catalog assets from FTP or HTTP servers via menu command:



- 1. Open the catalog to which you want to add the assets.
- 2. Select File > Add Assets To Catalog.

If you are prompted to select an Asset Handling Set for this cataloging process, make sure, you select an Asset Handling Set that has the URL Asset-Store activated.

If multiple Asset Storage Modules are activated in the employed Asset Handling Set a dialog appears. This lists the available Asset Storage Modules. One is the **URL AssetStore**, and others include the file system you are currently using (such as the Windows or Mac OS File System, among others).

- Select the URL AssetStore and click OK.A window appears which asks for an URL.
- 4. Enter the URL for the asset file (or folder on FTP only) you want to catalog.

A window appears that shows the status of the cataloging process.

After a moment, a thumbnail for the asset appears, indicating that the cataloging process was successful and a record has been created for the asset.

NOTE: If you catalog many or huge files, you can save time by deactivating the display of the cataloging progress. Before you start cataloging, disable the **Show Progress Bar** (General section of an Asset Handling Set definition, under While Cataloging).

Cataloging Assets via Drag and Drop

To catalog assets from FTP or HTTP servers via drag and drop:



- 1. Open the catalog to which you want to add the assets.
- 2. Launch your Web browser application.
- 3. Navigate to the asset, FTP folder or Web page which you want to catalog.
- 4. Select the link for the asset or FTP folder and drag it into the Cumulus Collection window

The progress information window appears and records are created for each of the assets.

If you are prompted to select an Asset Handling Set for this cataloging process, make sure you select an Asset Handling Set that has the URL AssetStore activated.

Working with URL-cataloged Assets

Certain functions in Cumulus work slightly different for assets stored on FTP or HTTP servers. The following sections describe only these slightly different functions. All of these functions are options of the Asset menu. If you open, print or mail an URL-cataloged asset, Cumulus first makes a copy of the asset.

To work with assets stored on FTP or HTTP servers you need to employ an Asset Handling Set with URL Support activated.

NOTE: If assets were cataloged from FTP or HTTP servers requiring a user authentication, the Cumulus application knows about this protection. When you access such an asset, Cumulus will ask you to enter user name and password. During the same session Cumulus remembers the entered name and password and will not ask you again if you access an asset from this FTP or HTTP server.

Opening Assets

You can open an asset stored on an FTP or HTTP server with either the application that created the asset, or another application of your choice. Applications you choose are added to the menu. You can add up to four. The fifth addition replaces the first, and so on. You cannot manually delete any of the added applications.

To open an URL-cataloged asset from another application:



- 1. Select the record whose asset you would like to open.
- Select Asset > Edit With and select the desired application from the submenu.

A dialog appears from which you can select a location for the copy of the asset

Choose the desired location and click OK.
 Cumulus copies the asset to the specified location and opens it with the chosen application.

Printing Assets

You can print an asset stored on an FTP or HTTP server with either the application that created the asset, or another application of your choice. Applications you choose are added to the menu. You can add up to four. The fifth addition replaces the first, and so on. You cannot manually delete any of the added applications.

To print an URL-cataloged asset from another application:



- 1. Select the record whose asset you would like to print.
- 2. Select **Asset > Print With** and select the desired application from the submenu.

A dialog appears from which you can select a location for the copy of the asset.

Choose the desired location and click OK.
 Cumulus copies the asset to the specified location and prints it with the chosen application.

Mailing Assets

As with other assets you can also attach an asset stored on an FTP or HTTP server to an outgoing e-mail message.

To mail an URL-cataloged asset:



- 1. Select the record whose asset you would like to send as an e-mail attachment.
- 2. Select **Asset > Mail To**.

A dialog appears from which you can select a location for the copy of the asset.

3. Choose the desired location and click **OK**.

Cumulus copies the asset to the specified location and \spadesuit asks you to select an e-mail application / \oiint launches your default e-mail application and attaches the selected asset(s) to an outgoing message.

Storing Assets on FTP Servers

The URL AssetStore Module also enables you to upload cataloged assets to FTP servers by using the Cumulus menu commands. It also allows you to employ FTP servers as the Central Asset Locations for catalogs.

Moving an Asset to an FTP Location

To move an asset to an FTP location:



- 1. Select the record whose asset you would like to move.
- 2. Select Asset > Move To.

The Select Asset Storage Module dialog opens which lists all available Asset Storage Modules.

- 3. Select the **URL AssetStore** and click **OK**. A window for entering an URL opens.
- 4. Enter a valid FTP-URL and click OK.

Cumulus moves the asset to the selected location and updates the reference of the selected record.

Copying an Asset to an FTP Location

To copy an asset to an FTP location:



- 1. Select the record whose asset you would like to copy.
- 2. Select Asset > Copy To.

The Select Asset Storage Module dialog opens which lists all available Asset Storage Modules.

- 3. Select the URL AssetStore and click OK. A window for entering a URL opens.
- 4. Enter a valid FTP-URL and click **OK**.

Cumulus copies the asset to the selected location.

Central Asset Location on FTP Server

Each individual catalog can be configured, so that Cumulus saves a copy of each cataloged asset to a specific location (called a 'Central Asset Location'). This option allows for the quickest possible way to locate and track a catalog's assets. The URL AssetStore Module enables you to employ an FTP server as a Central Asset Location for a catalog.

To set a URL as Central Asset Location:



- 1. Make sure the collection window containing the catalog is the active window in Cumulus.
- 2. Select **(Cumulus / (Edit > Preferences.**
- 3. Click Catalog Settings.

The Catalog Settings window is displayed. If the active collection window contains more than one catalog, select the catalog you want to edit under **Catalogs**.

4. Click **General**. This tab includes the options on central asset location.

Three situations are possible. The following describes the actions necessary for each situation.

- When the Central Asset Location Option is active and only its settings need to be changed, you can continue with step 5 below.
- When a Central Asset Location is defined but not active, enable the desired option and continue with step 5 below.

- When configuring a Central Asset Location for the first time, enable the desired option. The Select Asset Storage Module dialog opens and you can skip step 5.
- 5. Click **Browse** to choose the location.
 - The Select Asset Storage Module dialog opens which lists all available Asset Storage Modules.
- Select the URL AssetStore and click OK. A window for entering an URL opens.
- 7. Enter a valid URL of an existing FTP directory and click **OK**.
- 8. Click **Apply** to save your changes.

Working with Images

Cumulus provides special functions for users who work with images:

- The Cumulus Image Editor makes self-service image processing easy for anyone
- The IPTC Information window lets you easily view and edit metadata.
- The Digital Camera Raw Filter enables Cumulus to capture information when cataloging raw image formats and to preview raw image formats.

These special functions are described in the following sections. For a description on how to convert cataloged images, see "Converting Image Assets," p. 58.

Editing Images

The Cumulus Image Editor makes self-service image processing easy for anyone. Get the quick edits you need of your cataloged images. Cumulus offers image cropping as well as calibration tools that can enhance the color, sharpness and brightness of your images.

Image Editor

The features of the Image Editor apply to any asset that can be previewed in Cumulus. Start the Image Editor by selecting **Asset > Image Editor**.

Use the slider of the Navigator to zoom in and out the selected image. Clicking on the icons at the edges of the slider also zooms in and out. Double-clicking the navigation image optimizes the display size of the image for the window size of the Image Editor. The statusbar at the bottom of the window displays the zoom factor, the size of the image, its color space and color mode.

The various tools for image editing are offered on the toolbar. Click the icons to activate a tool and see its options.

#14369, #13380 - Imho reicht diese "Sparversion" der Beschreibung hier erst mal aus. Später kann das immer noch in aller Ausführlichkeit & voller Schönheit beschrieben werden.

FTo save the image modifications performed with any of the tools described in the following sections, click the **Save** icon () in the Image Editor toolbar. Then you may define the file format and color space (and compression rate or image quality, if applicable for the chosen file format) for the edited image. The following options for saving a file are offered:

- Save as new asset creates a new asset and, if desired, assigns it as variant to the original asset
- Overwrite asset replaces the original asset with the modified file
- Export to file system saves the modified file to any place on your file system

IMPORTANT! Embedded digital photo metadata (IPTC, XMP or EXIF) that may have existed in the original file, will not be saved with the edited image.

The following sections describe how each of the Image Editor tools work.

Cropping

The Crop tool is used to reduce the visible area of an image.

To begin cropping, click the image and draw a box around the desired area. Before accepting the crop, you can adjust the edges of the selection to fall exactly on the desired location. Simply place the cursor over one of the four side handles and drag to the desired location. While adjusting the cropped area, you can review the coordinates of the crop in the fields on the right.

You can also enter the desired size of the area to be cropped. This is useful for cropping an image for specific print or screen sizes, such as 4x6 or 640x480. If you enter a size, a box according to the dimensions is displayed and can be dragged over the image. To add sizes click the button.

You can adjust the unit of dimension by selecting pixels, inches or centimeters in the **Unit** pull-down menu.

Select the resolution for the cropped area from the **Resolution** pull-down menu. Click **Crop** to accept the crop.

Click Cancel to exit the Crop tool.

Rotating

The Rotate tool is used to adjust the angle of an image. You can rotate by 90 degrees clockwise and counter clockwise, and by 180 degrees. You can flip the image horizontally (along the vertical axis) and vertically (along the horizontal axis.)

TIP:

If you want to rotate JPEG images, you might prefer to use the **Transform JPEG Original** command in the **Asset** menu.

Click the button for the desired rotation.

Adjusting Brightness and Contrast, Gamma and Colors

This tool offers to adjust the tonal range of your images through brightness and contrast, the gamma value and colors.

Select the desired adjustment from the pull down menu. Depending on the selected adjustment, you are offered different options.

To see the result of your modifications in real time, activate the **Live Preview** option.

Click **Apply** to accept the adjustments.

Click Cancel to exit the tool.

Brightness and Contrast

It can help to correct blurry images and bring out fine details in tone. Dragging the sliders to the left decreases the levels of brightness and contrast; dragging them to the right increases the levels.

When **Preserve Color** option is activated, you can change brightness and contrast without losing color. (Only the brightness information of the image is affected by the modification, the color shades are left unchanged.)

Gamma

The gamma value of an image affects the way how its colors are perceived.

Dragging the slider to the left decreases gamma value; dragging it to the right increases the value.

Color

The options offered depend on the color space of the asset.

Dragging the sliders to the left decreases the levels; dragging them to the right increases the levels.

Resizing

The Resize tool is used to change the size of an image. To resize an image, define the new width and height in the corresponding fields. To maintain the current proportions of width to height, activate the **Keep Proportions** option.

The original resolution of images is not affected by resizing with Cumulus.

Click **Apply** to accept the resizing.

Click Cancel to exit the tool.

Applying Filters

Select a filter type from the pull down menu. Depending on the filter type you can define the strength and the radius range for the filter (1-100.) The radius determines how far the filter considers surrounding pixels that affect the filter action. Select the radius according to the image resolution.

The following filters are available:

- Average Blur Filter
 Softens an image. It smoothes transitions by averaging the color values of surrounding pixels. Eliminates noise where significant color transitions occur
- in an image.
 Median Filter

Reduces noise in an image by blending the brightness of pixels. The filter adapts the brightness of pixels to the median brightness value of the surrounding pixels.

Gauss Filter

Works similarly to the Average Blur filter but uses a weighted average of the color values of the surrounding pixels. The weighting is determined using the Gaussian bell-shaped curve that is generated.

TIP:

The Average Blur as well as the Gaussian filter decrease high-frequency details and can produce a hazy effect.

Sharp Filter

Increases the visual sharpness of images by increasing the contrast at edges.

TIP:

Applying the Sharp filter is recommended when scaling up images to keep their visual sharpness as high as possible.

- Unsharp Mask Filter
 - Makes images appear sharper by increasing the contrast of small brightness changes.
- Add Noise Filter
 Applies random pixels to an image, simulating distortion or noise. You can

also use the Add Noise filter to give a more realistic look to heavily retouched areas

To see the result of your modifications, you can activate the **Live Preview** option. To avoid time consuming live preview recalculations, you should activate this option after you changed the filter parameter values.

Click **Apply** to have the filter applied.

Click Cancel to exit the tool.

Using the IPTC Information Window

This section covers the basics of working with IPTC metadata and the IPTC Information window.

Preparation Steps

In order to make use of Cumulus IPTC data management capabilities, some preparations have to be made. The Cumulus catalogs in which you want to store IPTC data from assets have to be prepared. If you want to capture IPTC data from assets and to write back IPTC data to assets, the Asset Handling Set(s) and the catalog(s) managing these assets must be prepared for this feature. IPTC record fields have to be added to the catalog(s) and their properties have to be enabled for field linking. The Writing back Metadata option must be activated in the Asset Handling Sets used to handle the assets containing IPTC data.

Cumulus provides a script to help make the process of preparation easy: **Prepare Catalog For IPTC** (found in the Administration submenu of the File menu; see "Prepare Catalog," p. 176 for details). As image files often contain IPTC and XMP metadata, we recommend preparing the catalog for XMP as well. In order to know what you should be aware of when working with IPTC and XMP metadata, see the note that follows the description on how to prepare catalogs for metadata in your Cumulus edition's user guide.

IPTC Information Window

This Information window is specially designed for displaying and editing the IPTC data of assets. Cumulus can read IPTC metadata information while cataloging. You can view and edit this metadata and Cumulus can write your changes back to the asset. Cumulus' management of IPTC information conforms with the IPTC standard. Being considered the industry standard, its specifications are available to the public. Adobe Photoshop also partially uses this standard, meaning that text in images captioned in Photoshop's File Info will be displayed in the IPTC Information window. Photoshop only uses some of the available fields the IPTC standard comprises. Note that even if the other fields are not displayed in Photoshop, they are interchangeable between Cumulus and Photoshop.

NOTE: IPTC Data back to Assets

If you want to write back IPTC data to assets, your Cataloging Options (entry for the IPTC filter activated) and the catalog managing these assets must be prepared for this feature. IPTC record fields have to be added and their properties have to be enabled for field linking. Furthermore, writing back metadata must be enabled in the the Writing back Metadata section of the Asset Handling Set employed for asset access ((Preferences > Asset Handling Sets > Asset Access). Cumulus provides a utility to help make the preparation process easy: Prepare Catalog For IPTC (found in the Administration submenu of the File menu; see "Prepare Catalog," p. 176 for details). The IPTC data will be written back to the asset when any record information is changed.

To open the IPTC Information window:



- 1. Click once on a record to select it.
- 2. Select **Metadata > IPTC Information**. The IPTC Information window for the selected asset's record opens.

If you selected more than one record before selecting **IPTC Information**, the IPTC Information window will be opened for the selected records and will display only values that the selected records have in common. To see or edit the IPTC data of one record only, use the arrow buttons.

Once the IPTC Information window is open, you can use the arrow buttons to load other records of the current collection into the window.

Information can be added by entering text into the field or selecting from lists – so called 'quicklists'. Some fields provide prepared lists for immediate use. For some fields these quicklists are preset and contain values laid down by the IPTC norm. Due to IPTC standards, the preset quicklists for some of the fields can't be edited. The quicklists for all other fields can be edited.

To open or edit a quicklist for a field, make a right /alternate mouse click in the field. This opens a drop-down list for selecting a value. The fields for which you can edit the corresponding quicklist provide an entry **Edit Quicklist**. If you select this entry, a dialog for editing the quicklist opens. See "Editing Quicklists," below, for details.

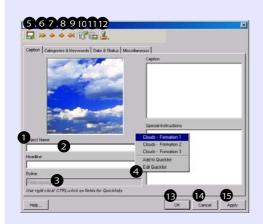
See the following overview of the options available from the IPTC Information window. .

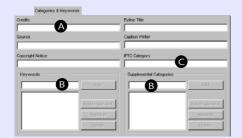
Overview: The IPTC Information Window

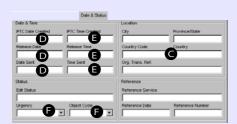
The IPTC Information window provides access to the IPTC data stored on an asset. The field contents are editable depending on the field type and the properties set for it.

To open the IPTC Information window: Select a record first and then select **Metadata > IPTC Information**

Overview: The IPTC Information Window









- 1 Name of the field (as defined in the IPTC Standard).
- 2 Content of the field for the selected record. If the field background is dark gray it cannot be edited (editable or not depends on the field type and whether **Allow User to Edit** is checked in the record field properties).
- 3 If a field is not included in the catalog, the field's background is dark gray and displays "Field missing".
- An alternate mouse click (Windows: right click; Mac OS: CTRL-click) opens a quicklist for selecting a value. Clicking the desired value copies it to the field. When selecting from a quicklist, all previous text in the field will be replaced (except in the Keywords and Supplemental categories fields where new entries will be added to the existing entries).

NOTE: If a quicklist contains more than ten values for one field, the display of the value is split into submenus.

The fields for which you can edit the corresponding quicklist provide an entry **Edit Quicklist**. If you select this entry, a dialog for editing the quicklist opens. (See "Editing Quicklists," p. 96 for details.) If a field contains a value that is not included in the quicklist yet, an entry **Add to Quicklist** is provided. Use this entry to add the current entry of the field to the quicklist.

- 5 Saves the changes.
- 6 Loads the first record from the collection window's current selection.
- 7 Loads the previous record from the collection window's current selection.
- 8 Loads the next record from the collection window's current selection.
- 9 Loads the last record from the collection window's current selection.
- 10 Opens a dialog for importing a quicklist. (See "Exporting and Importing Quicklists," p. 96 for details.)
- 11 Opens a dialog for exporting a quicklist. (See "Exporting and Importing Quicklists," p. 96 for details.)
- 12 Lets you choose a Metadata Template to apply pre-configured metadata.
- 13 Saves the changes and closes the windows.
- 14 Closes the IPTC Information window without saving changes.
- 15 Saves the changes without closing the window.

The letters mark a few examples of the various field types.

- A Most of the fields in the IPTC Information window are text fields. They allow you to enter text of one or more words. You can enter characters, numbers and special characters. The Caption and Special Instructions fields allow you to enter several lines of text.
- B **Keywords** and **Supplemental Categories**: These fields allow you to enter a number of entries consisting of one or more words. You enter a keyword by typing the word and then pressing the Enter key or clicking the **Add** button. You can then start typing the next entry immediately.
- C **IPTC Category** and **Country Code**: These fields can only contain a 3-character abbreviation. The corresponding quicklist only lets you add 3 characters.
- D These Date fields only allow values that are laid down by the IPTC norm. Due to this, you can only choose one of the standardized values for them after performing a right mouse click /alternate mouse click.
- E These Time fields can either be filled from the menu opened after performing a right mouse click/alternate mouse click or by entering a time value. If you enter a value for the time, use the format: hh:mm:sec
- F **Urgency** and **Object Cycle**: These are record fields of the type String List. You can select a value from the list opened after clicking the arrow button. To edit the provided values, you have to edit the record field properties (for a description on how to do this, see the Administrator Guide of your Cumulus Edition).

Editing Quicklists

The list displays the current values for the corresponding field. You can edit or delete these values or add new values to the list.

To add a new value:

Enter the new value in the field above the list and press the Enter key or click the **Add** button. You can then start typing the next entry immediately.

To edit a value:

Select the value. The value will be displayed in the field above the list. Edit the value in this field and then click **Replace**. The value in the field will replace the selected value in the list.

To delete a value:

Select the value in the list and click **Delete**.

Exporting and Importing Quicklists

Once you have adapted a quicklist to suit your needs, you may want to save it for special purposes or provide other users with. That's why Cumulus offers you the option of exporting and importing quicklists. When exporting a quicklist, it is saved into a document of the type QLS File (file extension: qls). To make use of such an exported quicklist with the IPTC window, you have to import this list by opening the document it is saved to.

To export a quicklist (saving it to a document):



- Select the button in the IPTC Information window.
 The standard dialog for selecting a location and saving a file opens.
- 2. Enter a name, select a location and click Save.

Now the list is saved and can be imported.

To import a quicklist:



- 1. Select the 🔂 button in the IPTC Information window.
- 2. The standard dialog for choosing a file opens.
- 3. Select the desired list and click Open.

Your quicklist will then be available in the IPTC Information window.

Working with Raw Images

Cumulus supports raw image formats of a wide array of digital cameras. You can find and organize raw image formats efficiently. Cumulus can extract metadata of raw image formats and store it in Cumulus catalogs. Additionally, EXIF information (camera settings, date, aperture and shutter speed etc.), and depending on the camera model, annotations and GPS are also captured when cataloging. Even Canon thumbnail files (THM) are supported. Converting assets stored in raw image format to JPEG and TIFF images on-the-fly is a breeze with Cumulus.

The Digital Camera Raw Filter enables Cumulus to capture information when cataloging raw image formats and to preview raw image formats. The captured information will be stored in Cumulus record fields.

The Digital Camera Raw Filter can capture metadata from the different raw image formats defined by leading camera manufacturers, namely, Canon, Fuji,

Kodak, Minolta, Nikon, Olympus, Sigma, Sinar and Sony. Check Canto's website for a detailed list of which cameras are supported.

Most cameras supporting Canon CRW files create additional thumbnail files (THM files). The Canon Raw Metadata Support enables Cumulus to capture metadata from these files and to manage these files. For more information, see "Canon DC Raw Image & Thumbnail File," p. 98

Cataloging Raw Image Formats

When cataloging raw image formats, your catalogs and Asset Handling Sets have to be prepared for this. The catalogs in which you want to manage your raw images must provide the corresponding record fields to store the special raw image information and the Asset Handling Sets you want to employ must have the Digital Camera Raw Filter activated. Its format entries must be in a certain sequence to achieve best results.

Captured Information

When cataloging, the Digital Camera Raw Filter can capture the following information from your raw images:

Information

Digital Camera Raw Fitter: Altitude, Aperture, Aperture (String),
Author, Camera ID, Camera Manufacturer, Camera Model, Captured
Date, Color Mode, Color Space, Contrast, Custom Rendered, Date
Time Digitized, Date Time Original, Digital Zoom Ratio, EXIF Version,
Exposure Bias, Exposure Mode, Exposure Program, Exposure Time,
Exposure Time (String), File Format, Flash Mode, FlashPix Version, F
Number, F Number (String), Focal Length [mm], Focal Length 35mm
Film [mm], Gain Control, Horizontal Resolution, ICC Profile Name,
Image Height, Image Orientation, Image Source, Image Width, ISO
Speed, Latitude, Lens Info, Light Source, Longitude, Max Aperture,
Max Aperture (String), Meter Mode, Saturation, Scene Capture Type,
Scene Type, Sensing Method, Serial Number, Sharpness, Shutter
Time [s], Software, Sound File, Subject Distance, Subject Distance
Range, Thumbnail, User Comment, Vertical Resolution, White Balance
Mode

Of course the filter can only capture the information contained in the cataloged images. The captured information will be stored in Cumulus record fields. The corresponding record fields have to be included in the catalog to which you want to add the raw images.

Some of the fields above may not be active in the catalog to which you want to add the raw images. To include them in a catalog, you have to add the corresponding fields to the Record Fields in the Catalog Settings dialog before cataloging your documents or updating your records. (For details on how to add record field to a catalog, .)

Format Entry Order

The Digital Camera Raw Filter is the only Cumulus filter that can read raw images. However, the entry numbers of the formats supported by this filter are important. When cataloging, Cumulus starts searching for matching formats at the lowest entry number. It employs the formats according to their entry numbers (lowest entry number first). If you want the Digital Camera Raw Filter to be employed for assets, check the order of the format entries in the Asset Handling Set you use for cataloging.

In order to ensure the Digital Camera Raw Filter works ideally for cataloging assets, you have to move the entries for the formats supported by it up in the list, so that they are at least before the first format supported by the TIFF Filter. The **Sinar DC Raw Image Format** should have a lower entry number than the first format supported by the Photoshop Filter.

Defining Filter Properties

The Digital Camera Raw Filter allows you to define properties for the different formats supported by this filter.

- Canon DC Raw Image (extension: crw, Mac File Type: CCDR)
- Fuji DC Raw Image (extension: raf, Mac File Type: RAF *)
- Kodak DC Raw Image (extension: dcr, Mac File Type: KDCR)
- Minolta DC Raw Image (extension: mrw, Mac File Type: MRW *)
- Nikon DC Raw Image (extension: nef, Mac File Type: NEF *)
- Olympus DC Raw Image (extension: orf, Mac File Type: ORF *)
- Sigma DC Raw Image (extension: x3f, Mac File Type: FOVb)
- Sinar DC Raw Image (extension: sti, Mac File Type: TIFF)
- Sony DC Raw Image (extension: srf, Mac File Type: SRF *)
 - *Mac File Types with 3 characters only end with a space

These properties are important for cataloging and previewing. For cataloging they are important only if you have activated the option **Entire Asset** under **Create Thumbnail from** on the Thumbnail tab of the Asset Handling Set employed for cataloging. Then the values set for the color settings and the color interpolation are used for creating the thumbnail.

For the previewing of each of the formats, you can define the source for a preview (thumbnail or entire image). If the source for the thumbnail to be created or the preview to be shown is the entire asset, the color settings and the color interpolation can be set.

For details on how to define these properties, see the Cumulus Filters Guide.

Canon DC Raw Image & Thumbnail File

Most cameras supporting Canon CRW files create additional thumbnail files. Along with a 160 \times 120 JPEG thumbnail of the original image in the associated CRW file, these files contain the EXIF information and optionally IPTC information. They always have the same name as the original CRW file, but with a THM file extension.

Cumulus supports these THM files. If the Canon Raw Metadata Support is activated in the Asset Handling Set employed for the CRW image, the THM files are treated as follows:

• If an image of this format is cataloged, the associated THM file will not be cataloged but the information it contains will be captured by Cumulus and stored in the record for the image.

NOTE: If the Canon Raw Metadata Support is activated when cataloging, you get a list displayed that informs you of the THM files that have not been cataloged.

- If you employ Cumulus to manage the cataloged image (copy, move, e-mail
 or delete), the associated THM file will be processed as well. Only when you
 employ the special copy function to select a category and then copying the
 associated assets by dragging this category on your desktop, the THM files
 will not be copied as well.
- If you rename the assets employing the Cumulus Rename To function, the THM files will not be renamed as well.

The Canon Raw Metadata Support is activated by default. If you want to deactivate it for certain Asset Handling Sets, see "(De)activating Asset Handling Modules," p. 118.



A little up-front planning can save countless hours of work and frustration further down the road. This section explains the setting up of preferences to suit your needs and also offers some information on Asset Handling modules and Asset Format support.

Customize Cumulus

Preferences

There is no best way to use Cumulus. Many aspects of the program can be changed to adapt to your way of managing your assets. Fundamental changes can be made by modifying the preferences.

For details on the different sets or settings see:

- "User Settings," p. 100
- "Record View Sets," p. 105
- "Category View Sets," p. 110
- "Asset Handling Sets," p. 113
- "Cumulus Asset Actions," p. 124
- "Metadata Templates," p. 129
- "Print Templates," p. 132
- "Sub-Pane Filters," p. 139

TIP: Properties for Sets, Templates and Actions

Clicking on the icon opens the Properties dialog of the selected set, template or action – offering two tabs. The Description tab allows you to enter a display name and a description for the item in each language supported by Cumulus. The Sharing tab allows you to define whether you want to share an item with others. And if you want to share, you may define specific users or roles that are allowed to use the item.

User Settings

The User Settings of the Cumulus Preferences provides access to your individual user settings.

//The User Settings section of the Preferences window contains tabs that separate sections. Beneath each tab are one or more sections that further organize options available. See the following overview on the options available.

Overviews on User Settings

For detailed information on the options available, see the following overviews. The "Overview User Setting (1)" gives informations on all options except the Display tab. The multifaceted option of the Display tab are described in the "Overview User Setting (2)"

Overview: User Settings (1)

General Tab

Select the tab first and then click the icon for the component.

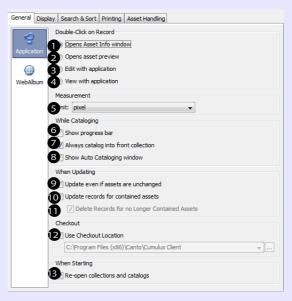
Cumulus Application

- Double-clicking on a record will open the Asset Information window.
- 2 Double-clicking on a record will open the Preview window.
- 3 Double-clicking on a record will open the asset for editing with the application used to create the asset.
- 4 Double-clicking on a record will open the asset for viewing with the application used to create the asset.
- 5 Selects preferred unit of measurement for heights and widths.
- 6 Forces Cumulus to count assets before cataloging begins, so that it can display a progress bar (slows performance).
- 7 Records of newly cataloged assets will always be added to the current collection.
- 8 Users carrying out auto cataloging (via a directory category) will be informed of auto cataloging activities: the Metadata Editor window will pop up.
- 9 Activate to include the records of unchanged assets in an update process useful e.g. if catalog settings have been changed).
- 10 Activate to updated the records for contained assets (related sub assets).
- 11 Activate to additionally delete records of no longer contained sub assets.
- 12 Not available with Single User

WebAlbum

1 Automatically loads the Album Layout that was used last when the WebAlbum feature is started. (See "WebAlbum," p. 65, for a description on how to use the WebAlbum feature.)

Display Tab



13 Cumulus will open all catalogs and collections that were open when Cumulus was closed the last time at startup. If this option is not enabled, Cumulus will always start without an open catalog or collection.



See "Overview: User Settings (2) – Display Tab," p. 103, for

Overview: User Settings (1)

Search & Sort Tab

Select the tab first and then click the icon for the component.
Cumulus Application

Category List Search & Category Search

The options found here affect the way the Cumulus application finds records using category searching (double-clicking on a category).

- 1 Found records must match at least one selected category.
- 2 Found records must match all selected categories.
- 3 Found set includes records assigned to parent categories of the selected category. (Categories that have subcategories are called parent categories.)
- 4 Found set includes records assigned to subcategories of the selected category.
- 5 Found set includes records belonging to the original category of a related subcategory.

NOTE: The settings # 3 to #5 (Category Search) also influence the search results when the Categories field is included in a search request (e.g. as Quicksearch does).

Quicksearch Fields

- 6 Activates the default setting for Quicksearch: a "contains" search in the record fields Record Name, Notes, Keywords, and Categories
- 7 No function with Single User.
- 8 Enables an individual setting for Quicksearch. If this option is activated, Quick Search will search the fields displayed in the list. You can then set up an individual selection of record fields to be used with Quicksearch. Click the **Add** button to get a list of all available record fields of the type String, String List and Integer. Quicksearch will perform a "contains" search for all included String and String List fields and an "is" search for all included Integer fields. Make sure the fields are correctly indexed for searching in the Catalog Settings of the catalogs where you want to use Quicksearch.

Printing Tab

1 If a Record View Set defines the layout for printing (and not the Advanced Print Settings), the records' thumbnails will be printed in high-resolution so the printouts can serve as contact sheets.

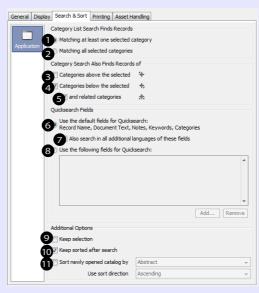
Asset Handling Tab

1 You can preset one Asset Handling Set used for cataloging in all catalogs and one Asset Handling Set for the asset access done in all catalogs. If you activate the **Show dialog** option, you can select an Asset Handling Set when cataloging assets.

OR

2 You can assign different Asset Handling Sets to different catalogs (even different ones for cataloging and asset access).

NOTE: The Asset Handling Set selected for asset access also determines the asset processors offered when converting an asset.

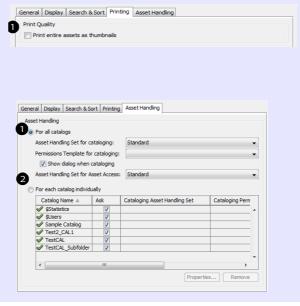


Additional Options

9 Selected records remain selected even when the collection is sorted with a different criteria or order, or when a search is performed and they appear in the search result, or when a filter is applied.

NOTE: After a search / sort / filter operation, the collection automatically scrolls to the first selected record, i.e. the first record displayed is not necessarily the first record in the collection (in this case, use the scrollbar to scroll to the top)

- 10 Sorting criteria are kept for the result of a search.
- 11 Enables the selection of a record field's contents as sort criteria when a catalog is newly opened. If you use a record field's contents as sort criteria, you can select ascending (A-Z, 0-9) or descending (Z-A, 9-0) sort order for it.



Overview: User Settings (2) - Display Tab

The Display Tab provides access to general display options, options for transparency display and the display options for the different view modes.

General

Thumbnail Size

Defines the sizes of small, medium and large thumbnails. The sizes defined here for thumbnails are those displayed when the respective size is selected.

Collection Window

- When selecting another View Set the settings for all windows and panes will change to those of the newly selected set. If the option is not activated, the settings will change for the currently selected pane or window only.
- 3 Highlights the active sub-pane in the color selected in the field on the right. Click the button to select a color.

Color Management

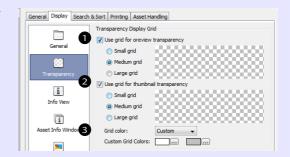
- 4 Shows preview with color management profile used by asset and highlights any part of the image that is beyond the printable color spectrum of the printer selected in # 5, below.
- 5 Selects a color management printer profile Mac OS: ColorSync; Windows: ICM. (Disabled if # 4 is not selected.)
- 6 Click to select a warning color for unprintable shades in an asset.

Transparency

Some asset formats create transparent areas in an image's preview or thumbnail. For these you can specify how the transparent areas are displayed. Such formats are: Portable Network Graphics (PNG), GIF Image, Photoshop (PSD, PSB), TARGA Image (TGA, TPIC), Windows Cursor (CUR) and Windows Icon (ICO).

Transparency Grid Display

- 1 If activated, the transparent areas of a preview are displayed as a grid and you can select the grid size. If not activated, the background color selected for the Record View Set is used for transparency display of a preview.
- 2 If activated, the transparent areas of a thumbnail are displayed as a grid and you can select the grid size. If not activated, the background color selected for the Record View Set is used for transparency display of a thumbnail.
- 3 Allows you to choose colors for the grid. You can either choose a pre-defined color combination or define your own custom combination. Click the buttons to select the colors for your custom combination.



View Modes - Groups of Options

The options for the different view modes – that is, the Info View, the Asset Info Window, the Preview View, the preview Window and the Category Info Window – comprise one or more of the following groups.

Audio

1 When you open the view, the voice annotation in the first Audio field of the Information window will be played.



Overview: User Settings (2) - Display Tab

Assets/Categories

Specifies what happens once you open an Information window

- 2 Cumulus opens a new Information window for each asset/category.
- 3 Cumulus uses one window to show information on all currently selected assets/categories. Displays and lets you edit common information for multiple records/categories.
- 4 The open window displays the records/categories currently selected in the Collection window and follows any selection changes.
- 5 The open window displays the values that are identical for all currently selected records/categories.

Window Position

6 Always displays the window on top of all other windows.

Preview Window Mode

- 7 Always opens a preview in fullscreen.
- 8 Always opens a preview in a separate preview window.
- 9 Keeps the Preview window always on top of the Cumulus main window (Default). – If deactivated, the preview window remains inside the Cumulus main window, as in earlier versions of Cumulus.

Preview View Size

10 Defines the sizes of small, medium and large preview views. The sizes defined here for preview views are those displayed when the respective size is selected.

Preview Image Size

You can select one of the following options:

- 11 Shows asset previews at the selected predefined preview view size.
- 12 Shows asset previews at the actual size of the asset. (For large images with high resolution, this could result in a very large preview.)
- 13 Enables selecting whether previews are enlarged or reduced to fit the size of the preview window.
- 14 Enables selecting whether the width of previews is enlarged or reduced to fit the size of the preview window.
- 15 Enables selecting whether the height of previews is enlarged or reduced to fit the size of the preview window.
- 16 Selects a predetermined size for all previews.

Additional Preview Settings

- 17 Hides the toolbar when the preview is displayed fullscreen (only available with the Preview Window settings).
- 18 Shows an error message if a preview can't be generated.

Use Mouse Wheel in Preview For

19 Toggle the mouse wheel function: Either use the mouse wheel to cycle between records, or between the pages of multi-page records.

TIP: Press Ctrl while using the mouse wheel to invert the way it works.





Window Position

Always keep window on top

10	Preview Vi	ew Sizes	
_	Small:	400	pixels
	Medium:	600	pixels
	Large:	900	pixels

Preview Image Size				
Use predefined size	Medium 🔻			
Original size				
13 Fit Image				
Enlarge smaller preview images				
✓ Reduce larger preview images				
14 fit Width				
Enlarge smaller preview images				
√ Reduce larger preview images				
15 Fit Height				
Enlarge smaller preview images				
Reduce larger preview images				
16 Other: 1024 pixe	els			



Record View Sets

Cumulus offers different views for records. The following views are defined in a Record View Set:

- Thumbnail View
- Report View
- Details View
- Info View
- Asset Info Window
- Palette Mode
- Preview View
- Preview Window

View Sets make it easy for you to switch between different views that are set up for certain formats or tasks. Once View Sets have been appropriately defined to meet differing demands, you can switch between them with just a mouse click. You can extensively customize most views.

Overview on Customization Options

For Thumbnail, Details and Information view as well as for Asset Information window and Palette Mode you can decide which record fields are displayed, their order and how they are displayed: font type, style, size, and color. You can also choose a background color for most of the views.

For some views you can even choose to use the color of a Label field as background color. For many views you can select the spacing around it and whether the record is displayed within a frame. For certain views you can also define that the field names are displayed along with the field values.

For Preview view and Preview window you can choose a background color. For Preview window you can choose whether and how the values (and names) of record fields should be displayed.

For each view set you can define the view that is to be displayed when the view set is selected. As soon as you have selected a view set from the drop-down list, the view will switch. This action is not activated by default. To activate this feature for a view set, you have to activate this option in the **Set Properties** section and then select the desired starting view.

Whether all views will change when changing the Record View Set or only the current one is determined by each user individually in her/his User Settings. (For details, see see "Overview: User Settings (2) – Display Tab," p. 103.)

Record View Sets and Multilingual Working Environment

For users working in a multilingual working environment certain view settings offer an **Allow language switch for multilingual fields** option. This option enables users to switch the language in which multilingual metadata fields are displayed. If this option is not activated, multilingual fields are always displayed in the language of the field that was added to the view.

Creating and Editing Record View Sets

To change an existing set:



- 1. Select **©** Cumulus / **B** Edit > Preferences.
- 2. Click Record View Sets.
- 3. Under **Set**, select the view set you want to edit.
- 4. Click the icon for the view you want to change.
- 5. Make the changes. For details see
 - "Adding a Field to a Record View," p. 107
 - "Changing the Properties of a Displayed Field," p. 109
- 6. Click Apply to save your changes.

TIP: Customize Entry in List for Selecting

If you have the appropriate permissions, you can easily access the preferences of Record View Sets by selecting the **Customize** entry in the list for selecting Record View Sets (e.g. in the Collection window or the Asset Information window). This entry opens the preferences for the current Record View Set.

A new view set is created by duplicating an existing one and adapting its settings:



- 1. Select **(Cumulus /)** Edit > Preferences.
- 2. Click Record View Sets.
- 3. Under **Set**, select the set to use as a basis for the new one.
- 4. Click the **Duplicate** button.

The Name and Settings dialog opens.

- 5. Enter a name for the new view set, and optionally
 - Activate the Allow Sharing option, if you want this view set to be available
 to other users.
 - Activate Copy display names only, if you also want to take over the language-specific display names from the original (not recommended for new view sets).
 - Activate Copy description only, if you also want to take over the descriptions specified for other languages from the original (not recommended for new view sets).
- 6. Click OK.
- 7. Define the new view set. (For details see "Adding a Field to a Record View," p. 107, and "Changing the Properties of a Displayed Field," p. 109.)
- 8. Click Apply to save your changes.

Setting A Default Record View Set

You can define one view set to be the default view set. This default view set will be used in case no other set is available or the selected set is not accessible. For example, a set that is stored with a collection was deleted after the collection had been saved. The default view set is denoted by **bold** characters in the list for selecting a view set.

To set the default view set:



- 1. Select **Cumulus** / B Edit > Preferences.
- 2. Click Record View Sets.
- 3. Under **Set**, select the view set you want to be the default one.
- 4. Click the **Set as Default** button.
- 5. Click **Apply** to save your changes.

Adding a Field to a Record View

To add a field to one of the views:



- 1. Select **© Cumulus** / **B** Edit > Preferences.
- 2. Click Record View Sets.
- 3. Under **Set**, select the view set you want to edit.
- 4. Click the icon of the view to which you want to add a field.

 A list of fields that are shown in the selected view is displayed.
- 5. Optionally: select the entry of the field after which you want to place the new field. If no entry ist selected, new fields will be added at the bottom of the list. (A field's position can be adjusted anytime with the buttons on the right side.)
- 6. Click the **Add** button.

The Add Fields to View window appears, providing two tabs:

- The **Fields** tab, displaying a list of all fields contained in the catalogs of the active collection that are not yet included in the view.
- The Modules tab, displaying the nodes: Catalogs, Modules and Languages.
 - The **Catalogs** nodes expands to a list of all catalogs open in the active collection. Clicking the plus sign in front of a catalog's name displays all fields contained in that catalog, but not yet included in the view. Either select the name of a catalog to add all contained fields, or select the individual fields you want to add.
 - The **Modules** node expands to a list of all Cumulus modules that provide fields. Clicking the plus sign in front of a module's name displays the fields supported by the respective module but not yet included in the view. Either select the name of a module to add all fields supported by that module, or select the individual fields tyou want to add.
 - The **Languages** node expands to a list of all languages configured for string field values. Clicking the plus sign in front of a language name displays the fields that support values in the respective language, but are not yet included in the view. Either select the name of a language's to add all respective fields, or select the individual language-specific fields you want to add.

Additionally, all language independent fields that are not yet included in the view are listed and can be added.

- 7. Select the field(s) you want to add.
- 8. Click **OK** to add the field(s) to the list of shown fields.
- 9. Click **OK** or **Apply**. Your changes take immediate effect.

TIP: Copying/Replacing The Fields From Another View

You can copy the fields included in one view to another view of the same Record View Set or you can replace all fields. Select the icon for the view you want to have the same fields as another view and use the alternate (right) mouse button to open a context menu. Select first the desired function and the view from which you want to copy the fields.

Adding a Separator to a View

Separators in views can make it clear to users which metadata fields belong together. Users can close a separator to hide its fields and make metadata editing much easier on views that contain many fields. You can add as many separators as you need, and make it easy to focus on only the fields that matter at the moment.

The Asset and the Category Info window as well as Info view support a delimiter element that allows to group fields.

You can add and remove a separator just as any other field.

To add a separator to an Info window or Info view:



- 1. Select **Cumulus** / **Edit** > **Preferences**.
- 2. Click Record View Sets or Category View Sets.
- 3. Under Set, select the view set you want to edit.
- 4. Click the icon for the view to which you want to add the separator. A list of fields shown in the selected view is displayed.
- 5. Select the entry for the field after which you want to place the separator.
- 6. Click the **Add Separator** button. A dialog for entering a name for the separator is opened.
- 7. Enter a name and click **OK**.

 The separator is added to the view.

To change the properties of a separator:



- 2. Click Record View Sets or Category View Sets.
- 3. Under **Set**, select the view set you want to edit.
- 4. Click the icon for the view you want to edit.
- 5. Select the entry for the separator whose properties you want to change.
- 6. Click the **Properties** button.

This opens a dialog for defining the font attributes and changing the name of the separator.

- 7. Make your selections.
- 8. Click **OK** to assign the selected properties to the separator.
- 9. Click the **Apply** button. The separator will be displayed according to your settings.

Changing the Properties of a Displayed Field

The properties of a displayed field define the font (type, style, size, and color) used to display the field contents.

To change the display properties of a field:



- 1. Select **()** Cumulus / **()** Edit > Preferences.
- 2. Click Record View Sets.
- 3. Under **Set**, select the view set you want to edit.
- 4. Click the icon for the view you want to edit.
- 5. Select the entry for the field whose properties you want to change.
- 6. Click the **Properties** button.

This opens a dialog for defining the font attributes and – depending on the field type – additional properties.

- 7. Make your selections. The options differ depending on the field type. (See "Additional Display Properties for Different Field Types," p. 110, for more information on additional properties.)
- 8. Click **OK** to assign the selected properties to the field.
- 9. Click the **Apply** button. The field is displayed according to your settings.

Additional Display Properties for Different Field Types

In addition to choosing the font, the Properties dialog offers different options depending on the field type:

- String Fields With Info View or Info Window only
 You can define the number of lines to display the contents of the field. For
 String List fields you can define the number of lines as well as display options.
 For String List fields that do not allow multi-select, you can decide to have the
 values displayed as drop-down list or radio buttons.
- String Fields Scroll Bar Display for Info View/Window on Mac OS!

 To have a scroll bar available for a String field in Info View or Info Window, you need to give it at least 5 lines.
- Picture Fields With Info Window, Thumbnail, Report and Info View
 lcons can be displayed to quickly inform about embedded metadata (e.g.
 EXIF, IPTC and XMP data as well as included color profiles, available versions
 or multi-page assets).
- Categories Field With Info Window and Info View only
 The language of Category tabs in the Asset Info window and in the Info view
 can be set via the Properties dialog of the Categories field. The set language
 governs the names of the Category tabs as well as the names of the categories displayed in the tabs. To specify a preferred language for the names activate Preferred language and select the desired language from the list. To
 automatically have displayed the language chosen in the View menu select
 As defined in View Menu.

Category View Sets

A Category View Set defines the display options for the Category Information window and the Category pane display. For each tab you can define different display options.

To change a Category View Set:



- 1. Select **(i)** Cumulus / **(B)** Edit > Preferences.
- 2. Click Category View Sets.
- 3. Under **Set**, select the tab whose view set you want to edit.
- 4. Make the changes.

For details on changes for the Category Info window see:

- "Adding a Field to the Category Info Window," p. 111
- "Changing the Properties of a Displayed Field," p. 112 For details on changes for the Category pane see:
- "Changing the Category Pane Display," p. 112

5. Click **Apply** to save your changes.

Category Info Window

You can add fields to the display and change the properties of a displayed field.

Adding a Field to the Category Info Window

To add a field to a Category Information window:



- 1. Select **(Cumulus /)** Edit > Preferences.
- 2. Click Category View Sets.
- 3. Under **Set**, select the view set you want to edit.
- 4. Click Category Info Window.

A list of fields that are shown in the Category Info window is displayed.

- 5. Optionally: select the entry of the field after which you want to place the new field. If no entry ist selected, new fields will be added at the bottom of the list. (A field's position can be adjusted anytime with the buttons on the right side.)
- 6. Click the Add button.

The Add Fields to View window appears, providing two tabs:

- The **Fields** tab, displaying a list of all category fields contained in the catalogs of the active collection that are not yet included in the Category Info window.
- The Modules tab, displaying the nodes Catalogs, Modules and Languages.
 - The **Catalogs** nodes expands to a list of all catalogs open in the active collection. Clicking the plus sign in front of a catalog's name displays all fields contained in that catalog, but not yet included in the Category Info window. Either select the name of a catalog to add all fields contained in that catalog, or select the individual fields you want to add.
 - The **Modules** node expands to a list of all Cumulus modules that provide fields. Clicking the plus sign in front of a module's name displays the fields supported by the respective module but not yet included in the Category Info window. Either select the name of a module to add all fields supported by the module, or select the individual fields you want to add.
 - The **Languages** node expands to a list of all languages configured for string field values. Clicking the plus sign in front of a language name displays the fields that support values in the respective language, but are not yet included in the Category Info window. Either select the name of a language's to add all respective fields, or select the individual language-specific fields you want to add.

Additionally, all language independent fields that are not yet included in the view are listed and can be added.

- 7. Select the field(s) you want to add.
- 8. Click **OK** to add the field(s) to the list of shown fields.
- 9. Click **OK** or **Apply**. Your changes take immediate effect.

Changing the Properties of a Displayed Field

The properties of a displayed field define the font (type, style, size, and color) used to display the field contents.

To change the display properties of a field:



- 1. Select **©** Cumulus / **B** Edit > Preferences.
- 2. Click Category View Sets.
- 3. Under **Set**, select the tab whose view set you want to edit.
- 4. Click Category Info Window.
- 5. Select the entry for the field whose properties you want to change.
- 6. Click the **Properties** button.

This opens a dialog for defining the font attributes and – depending on the field type – additional properties.

- 7. Make your selections.
- 8. Click **OK** to assign the selected properties to the field.
- 9. Click the **Apply** button. The field is displayed according to your settings.

Category View Sets and Multilingual Working Environment

For users working in a multilingual working environment view settings offer an **Allow language switch for multilingual fields** option. This option enables users to switch the language in which multilingual metadata fields are displayed. If this option is not activated, multilingual fields are always displayed in the language of the field that was added to the view.

Changing the Category Pane Display

To set up the display of the Category Tree to your needs you can select a background color and define the font type, size and color.

To change the display:



- 1. Select **Cumulus** / **Edit** > **Preferences**.
- 2. Click Category View Sets.
- 3. Under **Set**, select the tab whose view set you want to edit.
- 4. Click Category Pane.
- 5. Make your selections:
 - To change the background color, click the <u>u</u> button next to the **Back-**ground Color field.
 - To change the font, click the 🔲 button next to the **Font** field.

- To change the default display of the category pane, you can enable/disable various display options. You can activate the option to display the number of records assigned to the category right next to the category name. You can decide which tabs are to be displayed and which tab will be displayed when the current view set is selected by a user.
 For details on options only important if working in a multilingual environment see "Category Pane and Multilingual Working Environment," p. 113
- 6. Click the **Apply** button. The Category pane is displayed according to your settings.

Category Pane and Multilingual Working Environment

For users working in a multilingual working environment the settings for the Category pane offer following options:

- To allow sorting of categories according to the rules of a specific language and to enable the display of a manually re-ordered category tree, activate Enable/View language specific category sorting and custom ordering.
 NOTE: Language-specific sorting is performed either according to the rules of the application language or according to the rules of the
- To specify a preferred language for the display of categories, activate Preferred language and select the desired language from the list. To automatically have displayed the language chosen in the View menu select As defined in View Menu

selected preferred language, if a preferred language is specified.

• If for any reason the name of a category is not available in the preferred language, it is displayed in the base language. To have additionally displayed the name of the used base language, activate the If not available ... option.

Asset Handling Sets

An Asset Handling Set affects how Cumulus deals with your assets – during the cataloging process and when accessing assets. The options of a set are not specific to any one catalog.

In the Asset Handling Sets section of the Cumulus Preferences you can define different Asset Handling Sets. When a certain set is used depends on the individual user settings defined by the user.

In the User settings of the Cumulus Preferences, each user can define *one* Asset Handling Set for the cataloging done in *all* catalogs and *one* Asset Handling Set for the asset access done in *all* catalogs. Each user can also assign different Asset Handling Sets to different catalogs (even different ones for cataloging and asset access). And each user can define to be asked for an Asset Handling Set when cataloging assets. (See "Overview: Asset Handling Sets," p. 115 for details.) You can either change existing sets or create new ones.

Asset Handling Sets are created and edited in the Preference dialog window (Cumulus / Edit > Preferences > Asset Handling Set.)

Editing An Asset Handling Set

To change an existing Asset Handling Set:



- 1. Select **(Cumulus /)** Edit > Preferences.
- Click Asset Handling Sets.

- 3. Under **Set**, select the set you want to edit.
- 4. Make the changes.
- 5. Click **Apply** to save your changes.

See "Overview: Asset Handling Sets," p. 115, for an overview of the options available for Asset Handling Sets.

Of all the various settings available within an Asset Handling Set, those concerning Asset Storage modules are described in detail in the section "Asset Handling Modules," p. 118. Asset Formats are described in the section "Asset Format Support," p. 122.

Creating An Asset Handling Set

A new Asset Handling Set is created by duplicating an existing one and adapting its settings:



- 1. Select **(i)** Cumulus / **(B)** Edit > Preferences.
- 2. Click Asset Handling Sets.
- 3. Under **Set**, select the set to use as a basis for the new one.
- 4. Click the **Duplicate** button.

The Name and Settings dialog opens.

- 5. Enter a name for the new set, and optionally
 - Activate the Allow Sharing option, if you want this set to be available to other users.
 - Activate Copy display names only, if you also want to take over the language-specific display names from the original (not recommended for new sets)
 - Activate Copy description only, if you also want to take over the descriptions specified for other languages from the original (not recommended for new sets).
- 6. Click OK.
- 7. Define the new set. (See "Overview: Asset Handling Sets," p. 115, for an overview of the options available.)
- 8. Click **Apply** to save your changes.

Setting A Default Asset Handling Set

You can define one Asset Handling Set to be the default set. This default set will be used:

- when the set defined in the User Settings is not available.
- · when records are imported.

The default set is denoted by **bold** characters in the list for selecting a set. To determine the default set:



- 1. Select **©** Cumulus / **∄** Edit > Preferences.
- 2. Click **Asset Handling Sets**.
- 3. Under Set, select the set you want as default.
- 4. Click the **Set as Default** button.

5. Click **Apply** to save your changes.

Thumbnail Size and Quality

The thumbnail size and quality that you select when setting up an Asset Handling Set influences the size of a typical record and thus Cumulus' overall performance. Since Cumulus uses JPEG compression for grayscale and color thumbnails, the size of individual records varies depending on the thumbnail content. Higher quality thumbnails typically create larger records.

For example, a catalog containing 4,000 records and *normal* thumbnail quality (i.e., 128 x 128 pixels) yields a catalog that is approximately 50 MB in size. The same catalog with *high* thumbnail quality (i.e., 192 x 192 pixels) is 70 MB in size. To find out how much space thumbnails take up in a catalog, first select the

thumbnail size and thumbnail quality on the General tab. As you make your selections, the disk space required for each thumbnail (in bytes) is displayed in the Thumbnail Preview area.

Overview: Asset Handling Sets

Asset Handling Sets control the way the records of newly cataloged assets are created and how cataloged asset are accessed. The Asset Handling Sets defined here can be selected in the User Settings dialog or within dialogs when cataloging or accessing assets.

Thumbnails Tab

Create Thumbnails from

- 1 Some programs can save images with embedded thumbnails. This option uses those thumbnails, if available, instead of creating new ones. Stored thumbnails may differ in size.
- 2 Uses embedded thumbnails, if available and large enough (the minimum is the size defined in the section below, see # 4).
- 3 Creates thumbnail images of the entire asset's content. These thumbnails are of best quality, but this option slows the cataloging process. If a thumbnail cannot be created, the stored thumbnail is used.

Thumbnail Size

4 Selects default thumbnail size for all newly cataloged assets. Current records' thumbnails can be adjusted to the new size by updating the record. (See "Update Record," p. 191.)

Optimize Thumbnail

5 Equalizes the thumbnail images for newly cataloged assets automatically. This can also be done afterwards. (See "Optimize Thumbnail," p. 193.)

Quality

6 Sets thumbnail quality for the different color modes: Line art (NORMAL=2 color / HIGH=4 color), grayscale (NORMAL=8-bit grayscale, more compression / HIGH=8-bit grayscale, less compression), Color (NORMAL=24-bit color, more compression / HIGH=24-bit color, less compression.)

NOTE: High-quality thumbnails make records larger.



Thumbnail Preview

7 Displays the thumbnail quality and the disk space required for each thumbnail (in bytes) according to the selected options.

Overview: Asset Handling Sets

Cataloging Tab

When Cataloging

- Cumulus adds new records but doesn't update existing records whose assets have changed.
- 2 Cumulus adds new records and updates those records whose assets have changed.
- 3 Cumulus updates existing records only. No new records are added.

Add only - Asset Duplicates Handling

- 4 When cataloging, if Cumulus finds an asset that has already been cataloged, a duplicate record is created for the asset. NOTE: This is possible only when Add Only is selected, otherwise Cumulus thinks you're trying to update the existing record.)
- 5 When cataloging, if Cumulus finds an asset that has already been cataloged, it does not create a duplicate record.

AXR Options

8 No function with Single User.

Central Asset Location

- 9 Copies all newly cataloged assets to a central location specified in the Catalog Settings and makes the newly created record reference the copied asset. If you enable the **Delete Original Asset** option, the asset will be deleted at its original location after it was copied to the central location. Can be overridden by the Catalog Settings.
- 10 This is the "off" position for #9. Assets are cataloged normally and not copied to a central location.
- 11 No function with Single User.
- 12 Cumulus also copies assets that are contained in a cataloged asset to the Central Asset Location as discrete assets. Requires an activated corresponding AssetStore that can detect this relation and extract sub-assets that can be saved as discrete assets. (Appropriate AssetStores are available e.g for PDF, PowerPoint, Zip, and Quark XPress documents.) /

Asset Access Tab

Writing back Metadata

- 1 Record-field content is never written back.
- 2 Record-field content is written back to assets if possible.
- 3 If activated, the asset modification date will be updated when record-field content is written back to an asset.
- 4 If activated, record-field content is written back to external metadata container only, e.g sidecar files, without modifying the assets.
- 5 Record-field content is written back to assets if possible, dialogs may appear while resolving connection to assets.

Accessing Versions

- 6 No function with Single User.
- 7 No function with Single User.



Operating System Shortcuts/Aliases/Links

- 6 Cumulus resolves any links/shortcuts/aliases found in the selected assets being cataloged. This enables Cumulus to catalog the asset that the shortcut/alias points to.
- 7 Links/shortcuts/aliases are not resolved and assets they represent are not cataloged.

Adding Metadata

- 13 Define the view set used for the Metadata Editor. The fields included in the Information window of this set define what can be edited with the Metadata Editor.
- 14 Assigns a Metadata Template to the Asset Handling Set. This template will be used when an asset is cataloged with the Asset Handling Set. If this option is activated, you can select the Metadata Template to be assigned.
- 15 Metadata Editor will be activated when new assets are cataloged and new records get created.
- 16 Metadata Editor will be activated when records are updated.



Overview: Asset Handling Sets

Asset Formats Tab

The list in this tab displays all formats configured for the selected Asset Handling Set. Formats, that are supported by filters that are not installed on the machine you are working with, are displayed in italics. You can click on each column heading to re-sort the list by that field. A green marker indicates formats that are active. Deactivated formats are indicated by red markers. Activate and deactivate formats for the selected Asset Handling Set using the button #6.

- Automatically adds formats supported by newly installed filters to the list and activates them.
- 2 All formats will be cataloged. For unknown formats (not listed), the Cumulus Generic filter will be used. If this option is not activated, only those formats which are listed and activated in the list will be cataloged.
- 3 Opens the properties window for the format. (Only available if the filter provides any properties.)
- 4 Opens a dialog displaying available formats that are not included in the list.
- 5 Removes a format from the list. You can add it again using the Add button, but then it is appended to the list.
- 6 Activates/deactivates the selected format for the selected Asset Handling Set.
- 7 These buttons change the selected entry's position in the list. When cataloging assets Cumulus uses the filters in the order of the entry numbers of formats they support. This is important if you have multiple filters for the same file type. Starting from the top: move to top of list, move before current position, move behind current position, and move to end of list. (Disabled if no filter is selected.)

Modules Tab

The Modules tab includes multiple icons that provide access to the different modules. Asset Storage, Asset Processor and Metadata modules can be activated for the selected Asset Handling Set. For details on the Asset Storage, Asset Processor and Metadata modules, see "Asset Handling Modules," p. 118.

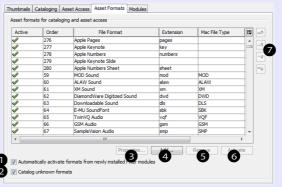
- 1 Displays a window that shows the version of the module.
- 2 Opens the properties window for the format. (Only available if the module provides any properties.)
- 3 Activates/deactivates the selected module for the selected Asset Handling Set.

Active modules are indicated by a green marker. Modules that have been deactivated have a red marker.

Modules that are indicated by italics are currently not supported (not installed on the machine you are working on.)

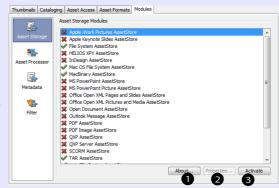
Under Filter you can see the Filter Modules that are available on the machine you are working on. Modules that are indicated by italics are currently not supported (not installed on the machine you are working on.)

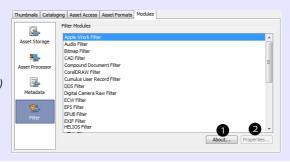
- 1 Displays a window that shows the version of the module.
- 2 Opens the properties window for the format. (Only if available.)



Active formats are indicated by a green marker to the left of the format. Formats that have been deactivated have a red marker to their left.

Formats that are indicated by italics are currently not supported (not installed on the machine you are working on), but are included in the list so they will be activated in that position when the filter is available.





Asset Handling Modules

When cataloging and accessing assets, Cumulus uses different modules: Asset Storage, Asset Processor, Metadata and Filter modules.

- Asset Storage modules manage the asset's storage (the access to its location), whereas a Filter module analyzes the asset's contents. For example, if you catalog a file from the file system of your computer, the Asset Storage module manages the access to the file system of your computer, and the employed filter reads the file's content.
- Asset Processor and Metadata modules are special modules for special tasks, e.g. to handle DCS (Desktop Color Separation) files and OPI (Open Prepress Interface).
- **Cumulus Filters** extract file-type specific metadata from assets. This information can include color mode, resolution, file type, font names, etc., depending on the type of asset.

Users who are allowed to define Asset Handling Sets can create their own Filter format options for specific file types (see "Extending Generic Filter Options," p. 123), and Canto is always updating existing Filters and creating new ones. Check Canto's Website (www.canto.com) for the latest Filter versions.

Cumulus makes it possible for you to determine precisely what sort of information should be kept on the assets. This can be defined differently for each catalog as each catalog has its own properties. It is the catalog properties that determine what information is stored on the assets in the record fields. (For further information, see "Catalog Settings," p. 142.) Linking metadata fields to record fields "feeds" the record with asset metadata during cataloging. The link can work in both directions—if supported by the corresponding Filter or Asset Storage Module—meaning that you can also write modified record field contents back to asset fields. By default, all Cumulus-supported record fields are linked to the matching asset fields. This also applies to fields that are included with Cumulus but not activated by default in every catalog. When you set up a catalog, you can define how these asset fields (from both Asset Storage modules and Filters) should be linked to the catalog's record fields. You can also define how to link the custom fields you define to asset metadata.

If you want to learn more about Cumulus' various modules, what they do and how they are configured to customize Cumulus to your specific workflow, then please continue reading the following sections that describe these modules.

(De)activating Asset Handling Modules

Depending on your workflow requirements, you may not need to use some of these Asset Handling modules. If, for example, you are not using services from a prepress service provider and do not have access to an OPI server, you should deactivate the OPI System Support. Deactivating modules which are not needed for your specific workflow enhances productivity by freeing up Cumulus' resources and speeding up the cataloging process. To meet individual workflow requirements Asset Storage, Asset Processor and Metadata modules can be activated and deactivated for each Asset Handling Set individually.

To activate or deactivate an Asset Handling module for an Asset Handling Set:



- 1. Launch your Cumulus application and open any one catalog.
- 2. Select **©** Cumulus / **⊞** Edit > Preferences.
- Click Asset Handling Sets.
- 4. Under Set, select the set you want to edit.

- 5. Click **Modules** and select the icon for the module type.
- 6. Select the desired module and click the **Activate /Deactivate** button.
- 7. Click **Apply** or **OK** to save your changes. Now the module is (de)activated for the selected Asset Handling Set.

Asset Storage Modules

The Asset Storage module manages the access to files. To catalog a file from the file system of a computer, the Asset Storage module for that computer's operating system must be activated for the Asset-Handling Set used. It must also be activated to enable you to access this file. If you are working in a cross platform environment you should have the Asset Storage modules for the other platforms activated as well so that you can access assets that are stored on other operating systems.

Mac OS File System AssetStore

This Asset Storage module manages the access to files accessible from a Mac OS computer. You can define the following properties:

- Preferred Resolving Method If By Alias with Pathname Fallback is enabled, Cumulus will resolve the asset reference using the alias first and if this fails then using the pathname. If By Pathname with Alias Fallback is enabled, Cumulus will resolve the asset reference using the pathname first and if this fails the alias. But if By Pathname is enabled, you can avoid a fallback by enabling the option No Fallback. Then only the pathname will be used for resolving the asset reference.
- Alias Search Method If Fast Search is enabled, Cumulus will only search at the original location. If Extensive Search is enabled, Cumulus will also search all mounted volumes in case the file wasn't found at the original location.
- Mount Dialogs Dialogs prompted by the operating system when mounting volumes can either be shown or suppressed. If you choose Suppress, failures might occur, when mounting volumes (especially removable volumes such as CD-ROMs), is required for Cumulus functions such as previewing, copying and transferring. That's why you should only choose the Suppress option if you are working in a network environment and want to avoid all dialogs about mounting when accessing the server. In case the server can't be mounted you will access the assets via Server Client Asset Transfer. It is highly recommended to choose the Show option.

MacBinary AssetStore

The Mac Binary AssetStore enables Cumulus to catalog MacBinary converted assets even on Windows machines. In addition to creating a record for the entire BIN file, it creates records for the compressed file in the BIN file. (No properties to be defined.)

TAR AssetStore

The TAR AssetStore enables Cumulus to catalog and access assets compressed within TAR archive files. It automatically catalogs all files in a TAR file. In addition to creating a record for the entire TAR file, it creates records for each file included in the TAR file - even for files in a TAR file within another TAR file. The Cumulus TAR AssetStore supports Bzip2, gzip and uncompressed TAR files.

The TAR AssetStore automatically creates categories when cataloging TAR files. On the Categories tab, under a category named **tar** for each cataloged TAR file, a

category is created named after the TAR file (e.g. **sample.tar**). If a TAR file contains another TAR file, a subcategory named after this additional file will also be created

You can define the character encoding used to create the TAR file that is to be unpacked by the TAR AssetStore. To know for sure, you should ask the person who packed it. If you aren't sure the character encoding used to pack the TAR file, you should use the default: Local Encoding

UNIX File System AssetStore

This Asset Storage module manages the access to files accessible from a UNIX computer. (No properties to be defined.)

URL AssetStore

This Asset Storage module manages the access to files accessible from FTP or HTTP servers. (No properties to be defined.) For more information, see "Using URL AssetStore," p. 86.

Windows File System AssetStore

This Asset Storage module manages the access to files accessible from a Windows computer. You can define the resolving method for assets stored on CD ROMs. If enabled, Cumulus checks for the CD-ROM label.

ZIP AssetStore

The ZIP AssetStore enables Cumulus to catalog and access assets compressed within ZIP files. It automatically catalogs all files in a ZIP file. In addition to creating a record for the entire ZIP file, it creates records for each of the compressed files in the ZIP file - even for files in a ZIP file within another ZIP file. The Cumulus ZIP AssetStore has been tested with ZIP compressed assets created with WinZip®, PKZIP® and WinRAR.

The ZIP AssetStore automatically creates categories when cataloging ZIP files. On the Categories tab, under a category named **Zip** for each cataloged ZIP file, a category is created named after the ZIP file (e.g. sample.zip). If a ZIP file contains another ZIP file, a subcategory named after this additional file will also be created. If any files contained within a ZIP file are archived with subfolder references, the ZIP AssetStore creates a category tree resembling this subfolder structure. (No properties to be defined.)

NOTE: Password Protected ZIP Files

If the ZIP file to be cataloged contains a password protected file, Cumulus will ask you for the password. Cumulus remembers this password and if there is another password protected file within a ZIP file, it will try the password for that file. If it doesn't fit, Cumulus will also ask you for the password to that file. Then you can either type in the password and the file will be cataloged, or skip the password request and file will not be cataloged. The passwords are also requested for any preview of a password protected asset. Cumulus remembers passwords only for as long as the current session.

You can define the character encoding used to create the ZIP file that is to be unpacked by the ZIP AssetStore. To know for sure you should ask the person who packed it. If you don't know for sure the character encoding used to pack the ZIP file, you should use the default: DOS Latin US

Asset Processor Modules

Asset Processor modules enable Cumulus to perform processes on cataloged assets, e.g. to convert them.

Pixel Image Converter

The Pixel Image Converter enables Cumulus to convert any cataloged pixel image into the different formats on the fly: e.g. JPEG, TIFF, BMP, GIF, ScitexCT, PNG, PCX, and PDF. (No properties to be defined.) For more information on how to use the Pixel Image Converter, see "Converting Image Assets," p. 58.

Thumbnail Provider

The Thumbnail Provider is used with Cumulus Actions only. It provides the thumbnail stored in the asset's record for a Cumulus Action. Using the thumbnail that is stored in the record might be faster than having the asset converted, e.g with the Pixel Image Converter. (No properties to be defined.)

Watermark AssetProcessor

The Watermark AssetProcessor enables you to embed digital watermarks into the following pixel image formats: JPEG, TIFF, BMP, GIF, PNG, and PCX. You can embed visible text and image watermarks. For more information on the processor and on how to use it, see "Watermarking Assets," p. 62.

ZIP Asset Processor

The ZIP AssetProcessor enables Cumulus to compress cataloged assets into Zip archives. (No properties to be defined.) For more information on how to use the ZIP AssetProcessor, see "Creating ZIP Archives," p. 64.

Metadata Modules

The Metadata modules are used for retrieving and managing special metadata information.

Canon Raw Metadata Support

Most cameras supporting Canon CRW files create additional thumbnail files (THM files). The Canon Raw Metadata Support module enables Cumulus to capture metadata from these files and to manage these files. For more information, see "Canon DC Raw Image & Thumbnail File," p. 98

Cumulus Metadata Support

The module **Cumulus Metadata Support** supports the storing of an asset's metadata in a separate TAG file for each asset. This makes it possible for stored metadata to be used externally (e.g. by other applications). Only if the Cumulus Metadata Support module is activated, will Cumulus be able to create a TAG file for each asset cataloged. (For further information on TAG files, see "Assets/ Records," p. 18 and "Browse for Assets," p. 171.) You can define the following properties for the Cumulus Metadata Support:

- **Never** If a TAG file exists, Cumulus Metadata Support will read it, but no TAG files will be created.
- Only if Metadata Exists If metadata in a TAG file exists, it will be updated.
- Always A TAG file for metadata will be created and continuously updated. For Directory Categories, Folder TAG files can be created. Remember, Directory Categories are automatically created and resemble the folder hierarchy in which

the assets reside. The Folder TAG file for a Directory Category is called **Cumulus Metadata.tag** and resides in the corresponding folder. If the Cumulus Metadata Support is activated and the option **Always** is enabled, a Folder TAG file will be created as soon as you change the Category information of a Directory Category. Folder TAG files are also created if you Drag & Drop a category to your Desktop or if you employ the menu item **Copy Assets Assigned to Category To** (for details, see "Copy Assets Assigned to Category To," p. 197). And note that if you use this way of copying assets, the TAG files associated to the assets themselves will not be copied even if the Cumulus Metadata Support module is activated.

XMP Metadata Support

The XMP Metadata Support module enables Cumulus to manage XMP files (e.g. Adobe Sidecar). (No properties to be defined.)

Asset Format Support

Probably one of the first questions you had about Cumulus was "What kinds of assets does it support?" Plain and simple, Cumulus supports *all* kinds of assets, in one way or another.

Enhanced support is offered for most popular formats, meaning that Cumulus is aware of them and knows what information to extract from them. Others are supported only to the extent that they can be added to a catalog, assigned to categories, and searched, but no preview or automatic in-depth asset information is available. And in some rare cases, an asset's record will feature a thumbnail on one platform, but not on another. For an <u>overview</u> on Cumulus enhanced format support see Canto's website.

Cumulus uses what are called filters to help it catalog the contents of an asset. Cumulus tells these filters what information to look for in that asset type so that it can become part of the asset's record. Cumulus comes with a number of filters that can capture detailed information about particular assets. You can also create your own format support for assets that are not particularly supported.

To see the list of file formats with enhanced support:



- 2. Click Asset Handling Sets.
- 3. Click **Asset Formats**. The list of all supported file formats is displayed.

Active formats are indicated by a green marker to the left of the format. Formats that have been deactivated have a red marker to their left.

Formats that are indicated by *italics* are currently not supported (not installed on the machine you are working on), but are included in the list so they will be activated at that position when the filter is available.

When cataloging, Cumulus starts searching for matching formats at the lowest entry number. It employs the filters in the order in which the formats they support are found. If you are not satisfied with the result of cataloging certain asset types, check the order of the formats (and the filter that support these formats). The format entry that is supported by a filter that best suits your needs may come later in the order than other matching filters.

Use the arrow buttons to the right of the list to change the order of the entries.

NOTE: Record Field Linking

If the **Read One** option in the Record Field Properties is activated for the field link, only the metadata read by the first matching filter will be stored within the record. (For information on record field linking, see page 153.)

If you only want to use a few of the formats on the list for the selected Asset Handling Set, you can disable the others to increase program performance.

Adding Formats to the Asset Formats List

To add new or not used formats to the Asset Formats list to have them available for Asset Handling Sets:



- 1. On the **Asset Formats** tab click **Add**. The Add Format dialog opens. It displays a list of all Cumulus modules that provide formats which are not included in the Asset Formats list. If you click the plus sign in front of a module's entry, the list expands and displays the formats supported by this selected module. You can either select a module's entry itself and all formats supported by the module will be added. Or you can expand the list and select a certain format to be added.
- 2. Select the format(s) you want to add and click **OK**.

New formats are placed at the end of the list by default. Use the arrow buttons to the right of the list to move the format, if necessary.

Changing Format Options

Some filters have options that you can change. The range of options depends on the filter.

To access a filter's options:



- 2. Click **Asset Formats**. The list of all supported file formats is displayed.
- 3. Select the entry for the desired format in the list. If the filter supporting it has options that you can change, **Properties** is activated.
- 4. Click Properties. The Filter Setup dialog is opened.
- 5. Make your selections and click **OK**.

Extending Generic Filter Options

Cumulus can catalog any digital asset. If **Catalog Unknown Formats** (below the list of asset formats) is activated and Cumulus encounters an asset for which no specific filter is available, then it uses its Generic Filter. You can expand the Cumulus Generic Filter's capabilities to create your "own formats." For assets that don't have specific format provided by Cumulus, you can define a thumbnail for the asset format by using the Generic Filter.

If you use formats that you've created on your own, check the Canto Website from time to time to see if a filter has been developed that supports this format and you could use.

To set up a new format:



- Select

 Cumulus /
 Edit > Preferences and then click Asset Handling Sets.
- 2. Click the **Modules** tab and then on the **Filter** icon to see the list of installed filters
- 3. Select the **Generic Filter** in the list and click **Properties**. The window to set up the properties for the new format appears.
- 4. Enter your format's file name extension in the **File Extension** field. Do not enter the period.
- 5. Type a name for the format in the **File Format** field.

 If your system is aware of the asset type, its name may be entered for you.
- 6. Enter the Mac OS file type in the **Mac OS File Type** field. The file type will always be 4 characters in length.
- 7. Enter the file format identifier (typically the mime type) in the **File Format Identifier** field.
- 8. Choose the kind of thumbnail you want to be displayed for the assets. You can use either the asset's finder / H Windows Explorer icon, a thumbnail generated by an external application, or an image that you specify. If you want to specify a thumbnail image to be used for the assets of the specified format, activate the Static Thumbnail option, which enables the Browse button. Then click the Browse button to select an image. You can use any JPEG file as a static thumbnail. The image is resized, if necessary, and pasted into the thumbnail image area. Each asset cataloged with this format will use this image as its thumbnail.
- 9. Click **OK** to save your new format.

To have the new format available for Asset Handling Sets you have to add it to the Asset Formats list:



- 1. Click the **Asset Formats** tab and click **Add**. The Add Format dialog opens.
- 2. Expand the **Generic Filter** entry by clicking on the plus sign on its left. The formats available are displayed.
- 3. Select the format you want to add and click **OK**.

New formats are placed at the end of the list by default. Use the arrow buttons to the right of the list to move the format, if necessary.

TIP:

If anything goes wrong while cataloging, check the file extension!

Cumulus Asset Actions

Cumulus Actions simplify daily workflow needs. An Asset Action refers to a combination of certain functions and can be saved under a chosen name. Whenever you wish to perform this combination of functions, all you need to do is select the corresponding action and it will be done. An Asset Action can include three different types of functions: Processing, Packing, Delivering

Firstly, you can have the selected assets processed, then you decide whether the result of this process should be packed into one file and finally, you define where

this file should be delivered. By default the delivery destination is the file system and the only packing possibility is the ZIP AssetStore.

Processing

Defining a processing module for an Action is optional. Processing modules will always produce as many files as records were selected for the Action. For processing, a list of possible modules is provided from which you can choose the module you want to use. (For descriptions of the modules, see "Asset Processor Modules," p. 121.) If you select more than one processing module for an Action, the sequence is important.

NOTE: The sequence of the processing modules must make sense. For example, having the Zip AssetProcessor as the first processing module and then using the Pixel Image Converter to produce JPEG files does not make any sense. However, doing it the other way around is fine. Then you will get one ZIP file for each selected record and each ZIP file will contain a JPEG image.

Packing

Packing modules pack the selected assets (or the files resulting from the processing) into one file. For example: if you have selected Pixel Image Converter for processing (to produce TIFF files) and then Zip AssetProcessor for packing, the result will be TIFF files for each selected record packed in one Zip file. Another example that might sound odd but also might make sense in certain circumstances: if you have selected the Zip AssetProcessor for processing as well as for packing, the result will be Zip files for each selected record packed in one easy to handle Zip file.

NOTE: The sequence of the processing modules must make sense. For example, having the Zip AssetProcessor as the first packing module and then using the PDF Page Merge AssetProcessor does not make any sense. However, doing it the other way around is fine. Then you will get one PDF compressed into a ZIP archive.

Delivering

Defining a delivering module for an Action is not optional. You have to define a delivering module for every Action.

Asset Handling Set

You can also select a specific Asset Handling Set to be used for the Action. If you don't specify one, the Asset Handling Set will be used that is defined in the User Settings of the user who uses the Action. As this Asset Handling Set might have some modules not activated that are needed for the action, we recommend selecting a certain Asset Handling Set. And it should correctly support the modules chosen for the Action.

See "Overview: Cumulus Asset Actions," p. 127, for an overview of the options available for a Cumulus Action.

You can either change existing Actions or create new ones. Asset Actions are created and edited in the Preference dialog window (Cumulus / Edit > Preferences > Asset Actions.)

Creating an Asset Action

A new Asset Action is created by duplicating an existing one and adapting its settings:



- Select Cumulus / B Edit > Preferences.
- 2. Click **Asset Actions**.
- 3. Under **Action**, select the Action to use as a basis for the new one.

4. Click the **Duplicate** button.

The Name and Settings dialog opens.

- 5. Enter a name for the new Action, and optionally
 - Activate the Allow Sharing option, if you want this action to be available
 to other users.
 - Activate Copy display names only, if you also want to take over the language-specific display names from the original (not recommended for new Asset Actions).
 - Activate Copy description only, if you also want to take over the descriptions specified for other languages from the original (not recommended for new Asset Actions).
- 6. Click OK.
- 7. Define the new Action. (See "Overview: Cumulus Asset Actions," p. 127, for an overview of the options available.)
- 8. Click Apply to save your changes.

Editing an Asset Action

To change an existing Asset Action:



- 1. Select **©** Cumulus / **B** Edit > Preferences.
- 2. Click Asset Actions.
- 3. Under Action, select the Cumulus Action you want to edit.
- 4. Make the changes.
- 5. Click **Apply** to save your changes.

See "Overview: Cumulus Asset Actions," p. 127, for an overview of the options available for Actions.

TIP:

You can easily access the preferences of Cumulus Actions by selecting the **Customize** entry in the submenu for selecting an Action. This entry opens the preferences for the current Action.

Setting A Default Asset Action

You can define one Asset Action to be the default. This default is not used with any standard function of this Cumulus version but may be used by any additional function, e.g. provided by a third party partner.

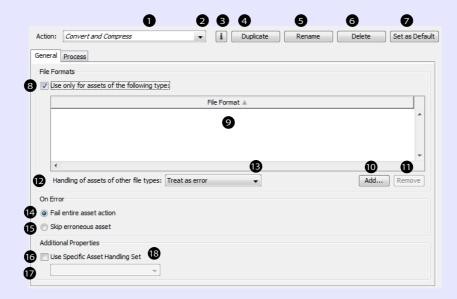
The default Asset Action is denoted by **bold** characters in the list for selecting the Action. To set the default Action:



- 1. Select **Cumulus** / **Edit** > **Preferences**.
- 2. Click Asset Actions.
- 3. Under **Action**, select the Action you want as default.
- 4. Click the **Set as Default** button.
- 5. Click **Apply** to save your changes.

Overview: Cumulus Asset Actions

Asset Actions refer to a combination of certain functions. Asset Actions defined here can be selected when using the menu item **Asset > Perform Asset Action**, when e-mailing assets and in the Collection Basket.



General Tab

- 1 Displays the selected Asset Action.
- 2 Opens a list of available Asset Actions for selection.
- 3 Opens the Properties dialog for the selected Asset Action providing two tabs. On the Description tab you may enter or modify language-specific display names and descriptions. The Sharing tab allows you to define whether you want to share the Asset Action with others. Additionally you may restrict the usage to specific users or roles.
- 4 Opens a dialog to create a new Asset Action by copying the selected
- 5 Opens a dialog to rename the selected Asset Action. NOTE:
- 6 Deletes the selected Asset Action.
- 7 Sets the selected Asset Action as default.

File Formats

- 8 If activated, the asset action will be applied only to the file types specified in the file formats list below.
- 9 List of file types that are handled by the asset action.
- 10 Opens a list of available file formats to be added to the list.
- 11 Removes the selected file format from the list.

- 12 Displays how files of formats that are not specified in the list are treated.
- 13 Opens a list of available options for not-listed files.

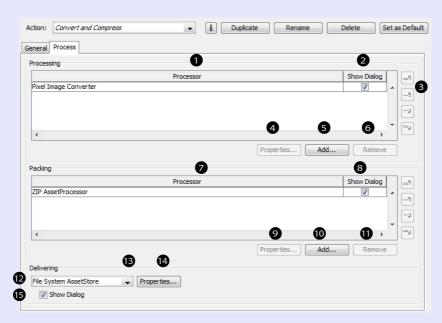
On Error

- 14 If an error occurs, the whole asset action is aborted.
- 15 If an error occurs, the erroneous asset is skipped, but the asset action is continued.

Additional Properties

- 16 Enables selecting a special Asset Handling Set to be used with the Action. If not enabled, the Asset Handling Set will be used that is defined in the User Settings of the user who uses the Action.
- 17 Displays the selected Asset Handling Set.
- 18 Opens a list of available Asset Handling Sets for selection.

Overview: Cumulus Asset Actions



Process Tab

Processing

- Lists the processor(s) selected for the Action.
 IMPORTANT! Make sure that the sequence of the processing modules makes sense.
- 2 If checked, the processor will display dialogs (e.g. for choosing properties) when the action is performed.
- 3 Use these buttons for ordering the sequence of the processing modules.
- 4 Opens a window to set the parameters for the selected processor for the action when used with the Action. (Disabled if no properties available.)
- 5 Opens a dialog to select the processor(s) to be added.
- 6 Removes the selected processor.

Packing

- 7 Lists the selected packing module(s).
- 8 If checked, the packing module will display dialogs (e.g. for choosing parameters) when the action is performed.
- 9 Opens a window to set parameters for the selected packing module when used with the Action.
- 10 Opens a list of available packing module(s) to be added.
- 11 Removes the selected module.

Delivering

- 12 Displays the selected delivering module.
- 13 Opens a list of available delivering modules for selection. If you select the URL AssetStore, the resulting file(s) will be uploaded to FTP (and HTTP). To determine the URL, click **Properties** (19.)
- 14 Opens a window to set parameters for the selected delivering module when used with the Action.
 - NOTE: If the Delivery module is the File System AssetStore, You can have the asset that derives from an Asset Action cataloged automatically. Note that the new asset can be cataloged only to a catalog that is open in the current collection when the Action is performed. If no packing module is included, the new asset will be determined as a variant. To have automatic cataloging, activate the **Catalog Resulting Files** option in the **File System Support Parameters** dialog. The **Settings** button enables you to select a catalog as well as an Asset Handling Set for the cataloging.
- 15 If checked, the delivering module will display dialogs (e.g. for choosing properties) when the action is performed.

Metadata Templates

Metadata Templates are used to add information to the metadata information that is stored on an asset. To make use of such a template, you can either use it while cataloging (along with an Asset Handling Set or the Prefiller Utility) or apply the metadata information to records of already cataloged assets. For a description on how to use Metadata Templates to apply metadata information to the records of already cataloged assets, see "Using a Metadata Template," p. 21. For a description on how to use Metadata Templates while cataloging, see "Employing the Metadata Editor," p. 172.

For defining a Metadata Template you can select record fields that should be filled when the Metadata Template is employed. These record fields can be all available field types except Binary fields. Clicking the **Add** button reveals a list of all available fields (provided by filters or by currently opened catalogs). For each field added to the template, you can enter a value. For String fields you can also define whether you want the new text to replace the existing value or to be appended to the existing text. Clicking in a String field's entry in the column **Fill Mode** allows you to select the desired mode. For all other field types, the entered value will replace the existing value. For date field types, the current date is shown initially. illustrating the date format to be entered. A date may be entered manually in the given format or selected with a date picker.

To have a field filled when the Metadata Template is used, the **Use** option for the field must be enabled.

You can either change existing templates or create new ones.

Metadata Templates are created and edited in the Preference dialog window

(Cumulus / Edit > Preferences > Metadata Templates.)

Creating A Metadata Template

A new Metadata Template is created by duplicating an existing one and adapting its settings:



- 1. Select **Cumulus** / **Edit** > **Preferences**.
- 2. Click Metadata Templates.
- 3. Under **Metadata Template**, select the Metadata Template to be used as the basis for the new one.
- 4. Click the **Duplicate** button. The **Name and Settings** dialog opens.
- 5. Enter a name for the new template and optionally
 - Activate the **Allow Sharing** option, if you want this template to be available to other users.
 - Activate Copy display names only, if you also want to take over the language-specific display names from the original (not recommended for new templates).
 - Activate Copy description only, if you also want to take over the descriptions specified for other languages from the original (not recommended for new templates).
- 6. Click OK.
- 7. Define the new Metadata Template. (See "Overview: Metadata Templates," p. 131, for an overview of the options available.)
- 8. Click **Apply** to save your changes.

Editing A Metadata Template

To change an existing Metadata Template:



- 1. Select **©** Cumulus / **B** Edit > Preferences.
- 2. Click Metadata Templates.
- 3. Under Metadata Template, select the template you want to edit.
- 4. Make the changes. (See "Overview: Metadata Templates," p. 131, for an overview of the options available.)
- 5. Click **Apply** to save your changes.



TIP:

You can easily access the preferences of Metadata Templates by selecting the **Customize** entry in the list for selecting Metadata Template (e.g. in the Asset Information window). This entry opens the preferences for the current Metadata Template.

Setting A Default Metadata Template

You can define one Metadata Template to be the default template. This default is not used with any standard function of this Cumulus version but may be used by any additional function, e.g. provided by a third party partner.

The default set is denoted by **bold** characters in the list for selecting a set. To set the default set:



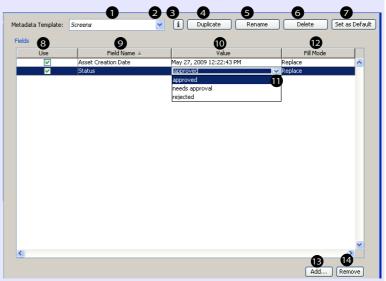
- 1. Select **(Cumulus /)** Edit > Preferences.
- 2. Click Metadata Templates.
- 3. Under Metadata Template, select the template you want as default.
- 4. Click the **Set as Default** button.
- 5. Click **Apply** to save your changes.

Overview: Metadata Templates

Metadata Templates are used to add information to the metadata information that is stored on an asset. They can be used while cataloging or for applying metadata information to records of already cataloged assets.

- 1 Displays the selected Metadata Template.
- 2 Opens a list of available Metadata Templates for selecting one.
- 3 Opens the Properties dialog for the selected template providing two tabs. On the Description tab you may enter or modify language-specific display names and descriptions. The Sharing tab allows you to define whether you want to share the template with others. Additionally you may restrict the usage to specific users or roles.
- 4 Opens a dialog to create a new Metadata Template by copying the selected one.
- 5 Opens a dialog to rename the selected Metadata Template.
- 6 Deletes the selected Metadata Template.
- 7 Sets the selected Metadata Template as default.
- 8 If you want a field to be filled when the Metadata Template is used, you have to enable the **Use** option for the field.
- 9 Name of the record fields that should be filled when the Metadata Template is employed.
- 10 Displays the value that will be filled in. To enter a value click in the the field's entry in the column Value.
 - NOTE: For date field types, the current date is shown initially, illustrating the date format to be entered. A date may be entered manually in the given format or selected with a date picker.
- 11 If a fields type String List is selected, the arrow opens a list containing the values of a String List field.

12 Displays how the field will be filled. For all field types except String fields, the entered value will replace the existing value. For String fields you can define whether you want the new text to replace the existing value or to be added to the existing text. Click in the field's entry in the column **Fill Mode** to select the desired mode.



- 13 Opens a list of the available record fields. Available fields are the fields that are provided by filters or by currently opened catalogs (except Binary fields) TIP: The list of fields contains an entry **Fields of record XYZ**, where XYZ is the name of the currently selected record. Selecting this entry will add all valid record fields to the metadata template and prefill them with the values from the current record.
- 14 Removes the selected record field from the template.

Print Templates

Cumulus provides enhanced print options for printing records. The different combination of print options can be combined and saved as Print Templates. Print Templates make it easy to select print options that are set up for certain views or tasks. Once Print Templates have been appropriately defined to meet differing demands, the user can easily select them for printing records.

If you have the appropriate rights, you can extensively customize most templates. There are Print Templates for individual use and templates that are shared with other users. Shared templates are displayed in *italics*.

A Print Template defines how records will be printed. Print Templates include definitions for the document layout (page size and orientation, as well as margins) and the layout of the records to be printed. To serve as print layout for the records, you can either use a Record View Set or define advanced print settings. The advanced print settings allow you to specify how the printed records will appear on the page. They include options for:

- the grid to be used (e.g number of rows and columns)
- the thumbnail (e.g. alignment and resolution)
- the fields to be included in the print-out of each record (including font selection)
- the header and footer text (including font selection)
- PDF creation (PDF security settings)

When defining advanced print settings for a Print Template, a Preview function enables you to check the result of your settings. You can see just what a page looks like before deciding to save the template.

Print Templates can be used when printing records (File > Print.)

Print Templates are created and edited in the Preference dialog window

(Cumulus / Edit > Preferences > Print Templates.)

Creating and Editing a Print Template

A new Print Template is created by duplicating an existing one and adapting its settings:



- 1. Select **©** Cumulus / **B** Edit > Preferences.
- 2. Click Print Templates.
- 3. Under **Template**, select the Print Template to be used as the basis for the new one.
- 4. Click the **Duplicate** button. The **Name and Settings** dialog opens.
- 5. Enter a name for the new template and optionally
 - Activate the **Allow Sharing** option, if you want this template to be available to other users.
 - Activate Copy display names only, if you also want to take over the language-specific display names from the original (not recommended for new print templates).
 - Activate Copy description only, if you also want to take over the descriptions specified for other languages from the original (not recommended for new print templates).
- 6. Click OK.
- 7. Define the new Print Template. (See "Print Templates," p. 132, for an overview of the options available.) **TIP**: If you define advanced print settings, use the Preview function to check your settings before you save them.

8. Click **Apply** to save your changes.

TIP: Previewing a Print Template including Live Previews of Images

If you want to check the result of your settings with live previews of images, you should select these images before you open the preference dialog. Select at least as many images as needed to fill the intended grid cells of one page.

To change an existing Print Template:



- 1. Select **(Cumulus /)** Edit > Preferences.
- 2. Click Print Templates.
- 3. Under **Template**, select the template you want to edit.
- 4. Make the changes. (See "Print Templates," p. 132, for an overview of the options available.) TIP: If you define advanced print settings, use the Preview function to check your settings before you save them.
- 5. Click **Apply** to save your changes.

Setting A Default Print Template

You can define one Print Template to be the default template. This default is not required by any standard function of this version of Cumulus, but may be used by additional functions, such as those developed by third party partners. The default template is denoted by **bold** characters in the list for selecting a template.

To set the default template:



- 1. Select **(m)** Cumulus / **(B)** Edit > Preferences.
- 2. Click **Print Templates.**
- 3. Under **Template**, select the template you want as default. This should be a shared template (denoted by *italics*).
- 4. Click the Set as Default button.
- 5. Click **Apply** to save your changes.

Overview: Print Templates

A Print Template stores a specific combination of print options. It can be used when printing records. Print Templates are created and edited in the Preference dialog window (Cumulus / E Edit > Preferences > Print Templates.

- 1 Displays the selected Print Template.
- 2 Displays a list of available Print Templates for selection.
- 3 Opens the Properties dialog for the selected template providing two tabs. On the Description tab you may enter or modify language-specific display names and descriptions. The Sharing tab allows you to define whether you want to share the template with others. Additionally you may restrict the usage to specific users or roles.
- 4 Opens a dialog to create a new Print Template by copying the selected one.
- 5 Opens a dialog to rename the selected Print Template.
- 6 Deletes the selected Print Template.
- 7 Sets the selected Print Template as default.

Document Settings

The Document Settings tab defines the layout for the entire document.

8 Paper Setup settings define the paper size: either a standard size or a custom size for which the width, height and measurement unit can be defined.

NOTE: The **Units** selected here refer to all measurements of the template.

Layout

The Layout tab defines the layout for the printed records. You can either use a Record View Set for the layout, or define advanced print settings.

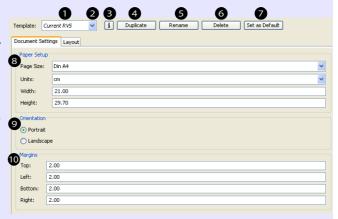
- 11 If activated, a Record View Set is used for the layout. If Record View Set Defines Layout is activated, you can choose:
- 12 The current Record View is used for layout.
- 13 A specific Record View from a a specific Record View Set is used for layout. You can select the Record View Set and the view to be used.

NOTE: If a Record View Set defines the layout and if you have activated the print option **Print Entire Assets as Thumbnails** in the Printing tab and set the thumbnail size to 1024 in the Display tab of your User Settings, the records' thumbnails will be printed in high-resolution, so the printouts can serve as contact sheets. This may take a while as each of the thumbnails has to be created.

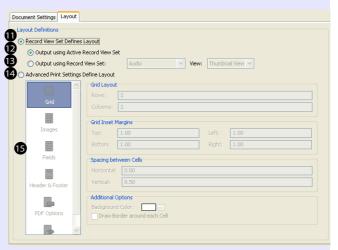
14 If activated, you can define Advanced Print Settings for the layout.

If **Advanced Print Settings Define Layout** is activated, you can:

15 Select the item you want to define for layout.



- 9 Orientation defines the orientation for the output (portrait or landscape).
- 10 Margins settings define the margins for the page layout.



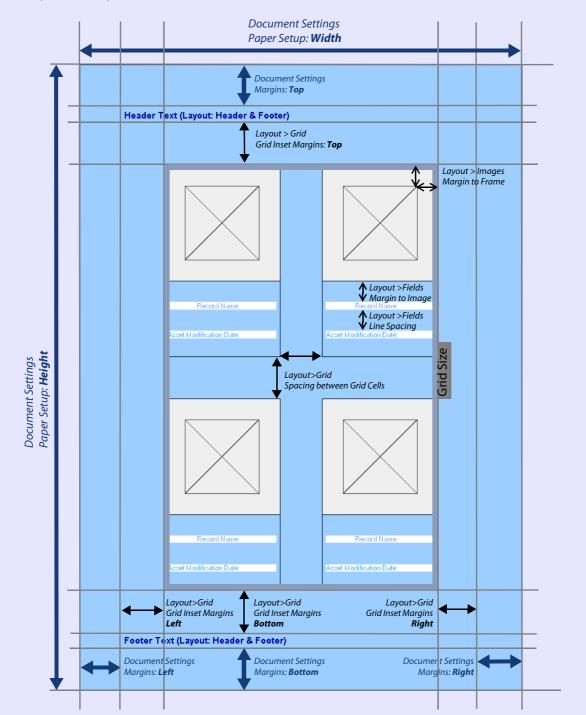
For an overview on the Advanced Print Settings, see "Overview: Print Templates – Advanced Print Settings," p. 136.

For an overview on the margin settings, see "Overview: Print Templates – Margin Settings," p. 135

Overview: Print Templates – Margin Settings

This example shows a page layout whose grid is set to two columns and two rows. Which makes four cells printed on a page. The grid shrinks to fit into the space left by the defined margins and spacing. The size of the cells depends on the size of the grid. Each image, regardless of size, is scaled in proportion to fit to one cell. The space left in a cell can be used to show field information.

This example indicates the margins and spacing you can define by arrows. The height of the header and footer is defined by the text (font and lines) entered in the Header & Footer section.



Overview: Print Templates – Advanced Print Settings

To define a Print Template, select **Cumulus** / **Edit** > **Preferences** > **Print Templates**.

If **Advanced Print Settings Define Layout** is activated on the Layout tab, you can define various layout options. The options are grouped by topic items and represented by icons. Select the corresponding icon to define your layout.

Grid

The grid determines how many records can be printed on one page. The number of columns and rows defines the amount (and size) of cells. Each cell contains a record. The grid shrinks to fit into the space left by the defined margins and spacing. For an overview of the margins and spacing, see "Overview: Print Templates – Margin Settings," p. 135.

Additional Options are:

- Background Color: Determines the background color for the entire pages except the areas around the image and for the field information. (See also below.)
- Draw Border around Each Cell: Activate this option to have a frame drawn around each cell.

Images

Each image, regardless of size, is scaled in proportion to fit to one cell.

- Alignment: Determines the alignment point for the image with respect to the cell.
- Background Color: see below
- Outer Margin: see "Overview: Print Templates Margin Settings," p. 135.
- Use Entire Assets at: Determines whether the entire asset should be used for printing and the highest resolution an image should be printed with. (The resolution for the printout cannot be higher than that of the original.)
 - Using the thumbnails is faster but using the entire assets lets you choose the dpi and so you can decide on the quality. Using the entire assets also lets you choose the JPEG quality.
- **Use Thumbnails**: Determines whether the thumbnail should be used for printing an image.
- Apply Assset Action: Activate this option to select an Asset Action to be performed, e.g. to watermark printed thumbnail
- Draw Border around each Image: Activate this option to have a frame drawn around each image.

Fields

Under **Fields Shown** define the fields which values you want to have included in the printout.

To add fields click the **Add** button. This opens a list of available fields. To define the display properties of a field, select the field and click the **Properties** button.

Properties concerning the layout of all displayed fields are set under **Additional Properties**.

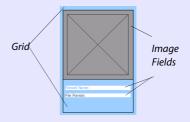
- Alignment: Determines the display position for record field values depending on Show Field Names activated or not. If Show Field Names is activated, the alignment point is the ending of the longest field name.
- Align to Image: Determines the display position with respect to the image.
- Margin to Image, Outer Margin and Line Spacing: see "Overview: Print Templates Margin Settings," p. 135.
- Background Color: see below
- Show Field Names: Activate this option to have the field names displayed along with the field value.

NOTE: Space for Displaying Field Information

Each image is scaled in proportion to fit to one cell. Only the space left in a cell is used to show field information. Take this into consideration when selecting the fields and defining their display properties. The image takes precedence over the field information. If an images fills a cell, the record field information will not be shown.

Background Colors

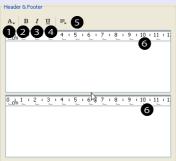
Background colors are defined by settings on the Grid, Images and Fields tab.



Overview: Print Templates – Advanced Print Settings

Header and Footer

The header and footer are printed at the top or bottom of each page throughout the print output. Headers and footers can include individual text and automatic text – for example, page numbers, the date, the catalog's name, or the user name. The text can be formatted.



- 1 Opens a dialog for defining the font attributes for the selected text.
- 2 Applies bold formatting to the selected text.
- 3 Applies italic formatting attribute to the selected text.
- 4 Applies underline formatting to the selected text.
- 5 Open a menu to select a placeholder for inserting automatic text or a small image at cursor position in the header or footer text. Automatic text is provided for common header or footer items, such as running total page numbers (Page 1 of 10), time and date. You can also include the name(s) of the catalog(s), the Login name of the user who uses the Print template or the name of the computer running your Cumulus application.

NOTE: You can also define your own placeholders for headers and footers. If you enter a word beginning with the % character (e.g. %project), Cumulus will open a dialog that asks you to fill this placeholder when a print process is started that uses this template.

6 Ruler that displays the tab stop positions and right document margin. The measurement unit for the ruler is the unit selected in the Document Settings.

To insert a tab stop, click on the position where you want it. To move a tab stop, drag the tab marker to the right or left on the horizontal ruler.

PDF Options

For an overview on the various options, see "PDF Print Options," p. 137.

Preview

Provides a preview reflecting the current status of the print template. Use this function to check your settings before you save them (by clicking **Apply** or **OK**.)

TIP: Resize the Preference window to see the preview sized to your needs.

 Use Live Previews of Selected Records: Activate this option to see the defined template with live previews of images. However, depending on the images' sizes and resolutions this may be time consuming.

TIP: Previewing a Print Template including Live Previews of Images! If you want to check the result of your settings with live previews of images, you should select these images before you open the preference dialog. Select at least as many images as needed to fill the intended grid cells of one page.

PDF Print Options

Cumulus requires no additional software to generate print output as PDF. The generated PDF documents can even include links to access the records via Internet.

To allow the creation of a PDF document, you must activate the **Allow PDF Printing** option in a Print Template. This enables a user to choose the **Print to PDF** option when the template is selected for printing. If the user chooses **Print to PDF** and the **Allow changes to PDF settings when printing** option was set in template, the dialog **PDF Print Settings** opens where several PDF options can be determined. The further PDF Print Options set in the template serve as pre-settings which can be changed in this dialog.

For PDF creation the following options can be pre-set in a Print Template:

webclientwebclientEnable PDF Security
 When creating PDF files you can use password security to add restrictions
 that can prevent a file from being opened, printed or edited. Passwords can
 only be set when creating the PDF document. (For details, see "Record Print ing to PDF with Cumulus," p. 138.) For details on the PDF security options that
 can be pre-set with a Print Template, see table below.

PDF security options that can be pre-set in a Cumulus Print Template are:

PDF Security Option	If the option is activated, users can
Allow Printing in High Resolution	print the document in any resolution
Allow Printing in Low Resolution	print the document at resolution no higher than 150-dpi
Allow Document Changes	change the document (including assembling and filling in forms as well as adding digital signatures)
Allow Document Assembly	assemble the document (insert, rotate, or delete pages as well as create bookmarks or thumbnail pages), even if Allow Document Changes is not set.
Allow Content Copying or Extraction	copy and extract document's contents (text and graphics)
Allow Content Copying or Extraction for Screen Readers	use screen reader devices for copying or extracting document's contents only. Visually impaired users are allowed to read the document with screen reader devices in any case. This option adds the permissions to copy and extract.
Allow Modifying Annotations	can add and edit comments as well as form fields and digital signatures
Allow Filling in Forms and Signing	fill in forms and add digital signatures only.

Record Printing to PDF with Cumulus

For printing records Cumulus offers the possibility to print to PDF. To generate print output as PDF no additional software is required. The PDF documents can even include links to access the records via the Internet.

To make use of the Cumulus PDF printing feature you have to use a Print Template for printing that uses the advanced print settings which are set to allow printing to PDF.

If you select a Print Template for printing records that allows PDF printing, you can choose to have the output saved as a PDF file.

If the Print to PDF File and the Allow changes to PDF settings when printing options were set in template, clicking on the Print button opens the PDF Print Settings dialog. The various options are pre-set as defined in the current Print Template. Only the password options are not pre-set to prevent them to be set by mistake or/and nobody can remember the passwords.

PDF Security

PDF security can be compared with home security. Just as you lock your doors to prevent others from entering your house without permission, you may use the various security features to "lock" PDF documents. For example, you can add passwords to restrict users from opening a PDF document, or they can prevent users from printing or editing a document.

A PDF file can have two kinds of password: a Document Open password and a Permissions password. If you are restricting printing and editing, you should add a Document Open password to enhance security.

- Opening the document with the correct Permissions password allows full access to the document. This unlimited access includes the ability to change the document's passwords and access permissions.
- Opening the document with the correct Document Open password allows additional operations to be performed according to the set PDF security options.

With **Enable PDF Security** activated but Document Open and Permissions passwords not specified, the document will be encrypted, with user-level access, and a random Permissions password is generated; the user will not be prompted for a password, but nobody can have full access to the document.

With **Enable PDF Security** activated but only the Document Open password specified, a random Permissions password is generated, the document will be encrypted and the user will be prompted for a password. Again, nobody can have full access to the document. If both passwords are specified, the document will be encrypted and the user will be prompted for a password; depending on the password entered, the user can have full access, or only restricted access to the document.

For details on the other options, see "PDF Security Option," p. 138.

Sub-Pane Filters

Sub-Pane Filters provide enhanced support for managing related assets. The panes of the split view display certain assets only. Assets that are related to the assets selected in the main pane. Which assets are displayed is determined by the option selected in the pane's display drop-down list. This option defines how they are related. Sub-Pane Filters make it easy to set up such options. Each Sub-Pane Filter is a list option in the sub-panes' display list. Cumulus provides various pre-configured Sub-Pane Filters that should suffice most needs but you can also create your own Sub-Pane Filters.

Creating and Editing a Sub-Pane Filter

A new Sub-Pane Filter is created by duplicating an existing one and adapting its settings:



- 2. Click **Sub-Pane Filters**.
- 3. Under **Filter**, select the Sub-Pane Filter to be used as a basis for the new one.
- 4. Click the **Duplicate** button. The **Name and Settings** dialog opens.
- 5. Enter a name for the new filter and optionally
 - Activate the **Allow Sharing** option, if you want this filter to be available to other users.
 - Activate Copy display names only, if you also want to take over the language-specific display names from the original (not recommended for new sub-pane filters).
 - Activate Copy description only, if you also want to take over the descriptions specified for other languages from the original (not recommended for new sub-pane filters).
- 6. Click OK.
- 7. Define the new Sub-Pane Filter. The settings define what will be displayed in a sub-pane for related assets view.

Choose the relation between the selected record(s) and the records displayed in the sub-pane by selecting a relation type from the drop-down list. For details on relations types, see "Relationships," p. 78.)

Then choose the level of relation. To have all

- First Level only: Only directly related, contained or referenced assets are displayed. (Example use: to see the assets contained in a ZIP file only and not the assets that may be contained in these assets.)
- Last Level only: (Example use: Remember, an image can be a variant of a source but it itself is also the source of another variant. But you don't care whether the selected record in the main pane is a variant of another vari-

ant. You are only interested in the top level variant source (the origin) and that's what you want to see in the sub-pane.)

• All Related Assets: The records of all related assets are displayed regardless of whether the relation is direct or indirect.

If you want to have only Pages and Slides or Video shots displayed in the sub-pane, activate the **Further ...** option and select **include only** from the drop-down list. Then activate the asset type that you want to be displayed only.

If you don't want to have Pages and Slides or Video shots displayed in the sub-pane, activate the **Further** ... option and select **exclude** from the drop-down list. Then activate the asset type that you don't want to be displayed.

If you want the displayed result to be based on selected records only, you can include a record query in the settings of the Sub-Pane Filter. To do so, activate the **Use Additional Query** option. The **Use Query** and **Use File** buttons are enabled. Click the **Use Query** or **Use File** button. A dialog for selecting the corresponding query will open. Select the query you want to apply as filter option and click **OK/Select**. The query is saved with the filter settings and the search conditions of the query are displayed. Note that the data of the query is saved with the Sub-Pane Filter and if you change the query later on, the Sub-Pane Filter will not be changed accordingly.

NOTE: All fyou cannot open the default folder for storing queries, it may be due to its folder properties. If the folder properties are set to **Hidden**, this folder cannot be addressed by the Select dialog. Then you either have to change the folder properties or save the queries to another location that you can access.

8. Click **Apply** to save your changes.

To change an existing Sub-Pane Filter:



- 1. Select **©** Cumulus / **B** Edit > Preferences.
- 2. Click Sub-Pane Filters.
- 3. Under Filter, select the one you want to edit.
- 4. Make the changes.
- 5. Click **Apply** to save your changes.

Setting A Default Sub-Pane Filter

You can define one Sub-Pane Filter to be the default. This default is not required by any standard function of this version of Cumulus, but may be used by additional functions, such as those developed by third party partners. The Sub-Pane Filter is denoted by **bold** characters in the list for selecting a filter.

To set the default Sub-Pane Filter:



- 1. Select **Cumulus** / **B** Edit > Preferences.
- 2. Click Sub-Pane Filters.
- 3. Under Filter, select the one you want as default.
- 4. Click the Set as Default button.
- 5. Click **Apply** to save your changes.



This section describes how to set the catalog settings to suit your needs and offers some suggestions for effective cataloging strategies, also it covers some catalog maintenance issues.

Managing Catalogs

Catalog Settings

Fundamental changes can be made to each catalog by modifying its settings. These settings have no effect on catalogs other than on the one for which they are set. It's important to consider a catalog's settings when the catalog is new, before you add records to it.

To access the settings of a catalog:



- 1. Make sure the collection window containing the catalog is the active window in Cumulus. If you have more than one catalog opened in the active collection window, the Catalog Settings window provides a list from which you can select the catalog you want to modify.
- 2. Select **(Cumulus /)** Edit > Preferences.
- 3. Click Catalog Settings.

The Catalog Settings window is displayed. If the active collection window contains more than one catalog, select the catalog you want to modify under **Catalogs**.

The settings for the selected catalog are displayed in the Catalog Settings window.

The Catalog Settings window controls several important factors that come into play while managing assets. The options are divided into the following sections:

- **General** Catalog location and name, sharing options and options on a central location for the assets.
- Record Fields Displays the record fields that the catalog contains. You can add or delete fields and customize selected fields. This allows you to organize the information that can be stored on an asset in its record. Remember, metadata retrieved from assets while cataloging can only be stored if the corresponding record fields are included in the catalog.
- Category Fields Displays the category fields that the catalog contains. You can add or delete fields and customize the fields.

See "Overview: Catalog Settings", below, for an overview of the options available from this window.

Overview: Catalog Settings

The Catalog Settings window has three sections that provide access to each of its options. The options that are set from this window are specific to the active/selected catalog. They have no effect on other catalogs.

General Section

Catalog

- Catalog file name, as seen from the Windows desktop/ Mac OS Finder (not editable from here).
- 2 Catalog name. Defaults to file name, can be changed. (See "Renaming Catalogs," p. 164, for details.
- 3 Displays the catalog format
- 4 Displays the catalog size (actual size/maximum size).
- 5 Prevents the creation of new categories that share names with existing categories.
- 6 Activates journaling for the catalog. (See "Journaling Catalogs," p. 158)

Sharing

- 7 No function with Single User.
- 8 No function with Single User.

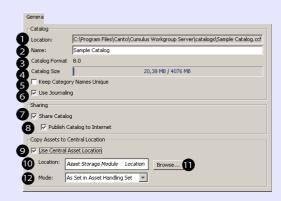
Copy Asset to Central Location

- 9 If activated, newly cataloged assets can or will be copied to the selected Central Asset Location – depending on the selected mode.
- 10 Displays the selected Central Asset Location
- 11 Opens a dialog for selecting the Central Asset Location.

Record and Category Fields Section

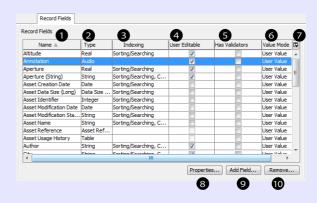
- 1 Field name.
- 2 Field type.
- 3 Overview on how the field is used for sorting and searching.
- 4 Overview on whether the user may edit the content of the field. Checkboxes may be activated/deactivated directly.
- 5 Overview on whether a field is a mandatory field, or whether the field value is checked by a validator. Checkboxes for display only!
- 6 Overview on the value mode
- 7 Opens a menu for selecting the columns to be displayed on this tab.
- 8 Opens dialog for defining field properties. For details see "Overview: Field Properties," p. 147.

NOTE: Catalog Name, Record ID and Category ID are so-called virtual fields. These fields are meant to be used for display and processing purposes only. Therefore you cannot define their properties.



- 12 Opens a dialog for selecting the mode for copying asset to the Central Asset Location.
 - **As Set in Asset Handling Set** the Asset Handling Set employed for cataloging decides if assets are copied to the selected Central Location.
 - **Always** Assets are always copied to the selected Central Location, regardless of the Asset Handling Set settings.

NOTE: Duplicates control with Central Asset Location! For controlling duplicates with Central Asset Location activated, the record fields Original Asset Identifier, Original Asset Name and Original Asset Reference are required. You have to add these fields to catalogs with Central Asset Location activated if you also want duplicates control.



- 9 Opens dialog for selecting the field to be added.
- 10 Removes the selected field from the list.

Employing a Central Asset Location

A Central Asset Location is a single storage location used to store specific digital assets. Employing a Central Asset Location ensures your assets remain accessible to all, and can more easily be accounted for. Cumulus lets you choose between different types of Central Asset Locations:

- File System Any standard file system location can be used as a Central Asset Location. The most common example is a network file server. This type is supported by the Asset Storage Modules for the operating systems.
- Internet (FTP) Servers If you need to keep files accessible from an Internet FTP server, you can choose an FTP server as Central Asset Location. This option is less popular for works-in-progress because of performance and other limitations associated with this type of server access; but when archiving assets, this option can be ideal. This type is supported by the URL AssetStore.

A Central Asset Location is chosen as a catalog property setting. Each catalog can have its own Central Asset Location. What the best choice is depends on how the catalog is used. For more best practice information on Central Asset Locations, see the tutorial "Understanding Central Asset Locations in Cumulus" from Canto's "Exploring Series."

To configure a catalog to employ a Central Asset Location:



- 1. Make sure the collection window containing the catalog is the active window in Cumulus.
- 2. Select **©** Cumulus / **B** Edit > Preferences.
- 3. Click Catalog Settings.

The Catalog Settings window is displayed. If the active collection window contains more than one catalog, select the catalog you want to edit under **Catalogs**.

- 4. Click General.
- 5. Under Copy Assets to Central Location, enable **Use Central Asset Location**. The next step is to choose where to store the copies and which Asset Storage module you want to use.
- 6. Click Browse. The Choose an Asset Storage Module dialog opens.
- 7. Select the desired module and click **OK**. The next steps depend on the selected module:
 - Selecting the **URL AssetStore** opens a dialog for entering a URL. Enter a valid URL of an existing FTP directory and click **OK**.
 - Selecting a File System AssetStore opens a dialog to select a folder.
 Browse for the folder you want the asset to be stored in and then click OK.
 A further dialog appears offering options for the automatic creation of subfolders:

None: All cataloged assets are stored in the same folder

By Date: Subfolders are created on a daily basis. Assets cataloged on the same day are stored in the same folder. If two or more assets have identical file names, a unique identifier will be added to the file name.

By Unique Identifier: Every cataloged Asset gets it's own folder and unique path where it is stored within the Central Asset Location. Select the desired option and click **OK**.

8. Select the mode for copying assets to the central asset storage location chosen above. The mode determines when the Central Asset Location is used:

- As Set in Asset Handling Set the Asset Handling Set employed for cataloging decides if assets are copied to the selected Central Location.
- Always Assets are always copied to the selected Central Location, regardless of the Asset Handling Set used.
- Click Apply to save your changes and select the next catalog you want to set up for a Central Asset Location.
 OR

Click **OK** to save your changes and close the Preferences window.

When users catalog assets to this catalog from now on, the asset can be copied or will be copied to the selected Central Asset Location.

NOTE: Central Asset Locations and Asset Handling Sets

Every Asset Handling Set that is to be used with a Central Asset Location (for cataloging or access), must be configured with the Central Asset Location's corresponding asset storage module activated. So, activate the Mac OS and Windows AssetStore modules for file system locations, the URL AssetStore for FTP locations.

Customizing Field Properties

The properties of a catalog field can be extensively customized. You can define:

- whether the field can be edited
- whether the field values should be based on formulas
- whether and how the field is indexed for sorting and searching
- whether and how the record field is linked with the asset and its metadata fields

To access the properties of a record field:



- Make sure the collection window containing the catalog is the active window in Cumulus.
- 2. Select **(Cumulus / B)** Edit > Preferences.
- 3. Click Catalog Settings.

The Catalog Settings window is displayed. If the active collection window contains more than one catalog, select the catalog you want to edit under **Catalogs**.

- 4. Click **Record Fields** or **Category Fields**. This displays a list of the current record or category fields included in the catalog.
- 5. Select the entry for the field whose properties you want to change.
- 6. Check the **Sorting**, **Contain Search** and **User Editable** options for the field and activate the desired options. (See "Record and Category Fields Section," p. 143, for all available options.)
- 7. Click the **Properties** button. This brings up a dialog in which you can set the properties for the field. The properties depend on the field type. (See "Overview: Field Properties," p. 147, for all available options.)
- 8. Define the properties as you want them.
- 9. Click **OK** to close the Field Properties window. This brings you back to the fields list.

TIP: Editing Field Properties of Multiple Record Fields At Once

Certain field properties can be activated or deactivated for multiple fields at once. On the record fields list, select the fields and use the alternate (right) mouse button to open a context menu. The menu options match the field properties you can (de)activate for multiple fields at once.

Selecting a menu item opens a submenu that offers **Enable** and **Disable** options. Select the desired option and the field property will be enabled/disabled for your selection of fields. If your selection of fields includes a field type that does not have the selected property, this field will just be ignored.

Overview: Field Properties

The Field Properties window reflects the field type. Most properties are the same but certain field types, e.g. an Audio field cannot be used for indexing and an initial value does not make any sense. That's why the properties dialog for this field type does not provide these fields.

General Tab

Field Properties

- 1 Field name. You can use this field to edit a field's name.
- 2 Opens the Field Name Editor to enter/edit the display names and, if desired, descriptions of the fields in other languages. Language-specific names will be displayed according to the selected application language. The according field description will be displayed as the field's tool tip in the information window, information view and information pane. Useful in multilingual environments.
- 3 Displays the Field type.
- 4 With String List Fields only: If activated, the users can select multiple values for this field in the Info View or the Information window. The values are displayed with check boxes. NOTE: Whether this option is activated or not influences the available indexing options. If activated, the field can be indexed for contain-searching but not for sorting.
- 5 No function with Single User!

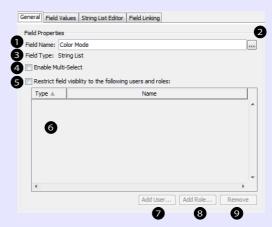
Indexing

The options available depend on the field type.

- 10 Field can be used for sorting and searching. (Equivalent to the Sort/Search check box in the Field List column.)
- 11 The index for sorting records can be set language dependent. Depending on the language selected for running the Client application the sorting will follow the rules of the language. Activate the languages your users run the Client application in. Then a language specific sorting index will be created for each of the selected languages. And if the Client application is started in one of these languages, a language specific sorting of records can be provided.
- 12 Field can be used for searching by means of the operators "contain" or "doesn't contain." (Equivalent to the Contain-Search check box in the Field List column.)
- 13 If activated, searching the contents of String fields can be speeded up significantly. Use this option with care because it enlarges the catalog size. The optimization of the search index requires more memory in the catalog and therefore activating this option is only recommended for fields with little data content.
- 14 If activated, Cumulus provides an additional search function for the Find window and the Advanced Find window. You can search for whole words, not just for matching strings. Enclose the word you are searching for in single quotation marks and Cumulus will only find the records that contain the exact word.

Additional Options

- 16 Field will be included in the Record pane's drop-down list for sorting
- 17 Field will be offered as search criteria in the drop-down lists of Find windows and filter definitions.



- 6 No function with Single User!
- 7 No function with Single User!
- 8 No function with Single User!
- 9 No function with Single User!



For example searching for **copy** will find records containing the words **copy** as well as **copyright**, **copyhold**, **copyfree** and so on. Searching for **'copy'** will find records containing the word **copy** only

15 No function with Single User!

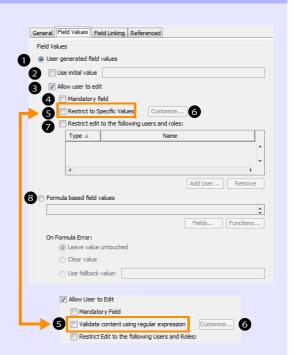


Overview: Field Properties

Field Values Tab

The values of fields can either be defined by the user or be based on formulas.

- 1 If activated, the field value can be defined by the user.
- 2 Fills the field with an initial value (as defined in the field to the right). (See "Initial Value for Fields," p. 149, for details.)
- 3 Allows a user to edit the field contents. (Equivalent to the User Editable check box in the Field List column.)
- 4 If activated, the field must be filled with a value when metadata are edited. In the Information window or view, empty mandatory fields are marked with a special icon and a validator pane is displayed. Changed metadata can only be saved if all required fields are filled in.
- 5 No function with Single User.
- 6 No function with Single User.
- 7 No function with Single User.
- 8 If activated, the field values are based on the formulas defined below. For details on how to define such formulas, see "Field Formulas," p. 149.



String List Editor Tab

This tab is provided for String List fields only. See "Editing a String List Field," p. 157, for details.)

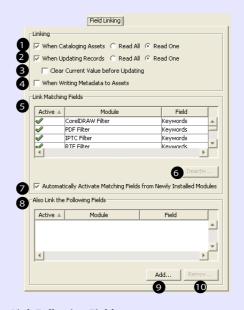
Field Linking Tab

Linking

- 1 When cataloging assets, the selected record field will be filled automatically. (Read One: only the first matching field will be used).
- When updating records, the selected record field will be filled automatically. (Read One: only the first matching field will be used).
 - NOTE: Do not activate this option if you want to keep the additional information you have entered.
- 3 Before updating records, existing values will be removed from the selected record field. Allows to refresh the field's contents from new asset values, without accumulating unnecessary metadata in the field.
- 4 Any changes in field contents will be written back to the asset, if the file format and the filter for the asset format support this function and if **Always** or **Silently** is enabled under Writing Metadata to Assets in the Asset Handling Set used. NOTE: Only if this option is activated for IPTC fields the IPTC information edited in Cumulus can be written back.

Link Matching Fields

- 5 List of fields with the same GUID (globally unique identifier) or name and type that can fill data into the record field. If activated the asset field will fill the record field.
- 6 Activates/deactivates the selected field for matching.
- 7 If a new Filter module is added that provides any matching fields, these fields will be added and activated automatically.



Also Link Following Fields

- 8 List of fields that are also linked. Use the Add/Remove buttons to add/remove fields to/from this list.
- 9 Opens a dialog to select the field to be added.
- 10 Removes the selected field from the list.

Referenced Tab

 $Provides\ an\ overview\ of\ the\ View\ Sets, Metadata\ Templates\ and\ Print\ Templates\ that\ bear\ a\ reference\ to\ the\ field.$

Defining Field Values

The values of fields can either be defined by the user or be based on formulas. If defined by the user, a field can have an initial value and you can allow users to edit it or even force them to edit it (mandatory fields).

Initial Value for Fields

To add a default text to a field (e.g. the Notes field) of all newly cataloged assets in a certain catalog, you have to enable the option **Initial Value** for the field and enter the text you want to have as default. If the asset's metadata already contain a value for this field, the initial value will be ignored.

As the initial value of a String List field must be one of the terms you entered for the String List, you do not enter the initial value but select a term from the list provided when clicking the ____ button next to the field.

The initial value of a Boolean field is "false" if the **Active** option is not checked. If you activate this option, the initial value is set to "true".

Mandatory Fields

If the **Mandatory Field** option is activated for a field, the field must be filled with metadata when the metadata are edited. If windows or views which allow the editing of metadata contain empty mandatory fields, these fields are marked with a special icon and a validator pane is displayed at the bottom of the Information Window or Information View. Changes to the metadata can only be saved if all required fields are filled in.

The **Mandatory Field** option is available for the following field types: Data Size, Date, Date Only, Integer, Label, Length, Long, Rating, Real, Resolution, String, String List, Time Only.

NOTE: With automatic cataloging the mandatory option attribute is not considered valid but as soon as a user edits any metadata of a record that includes an empty mandatory field and is going to save the changes, a message reminds him/her when the record is saved

Table Fields

Table fields are special field type that can include other metadata fields. The properties of Table fields differ from other field types.

This field type serves as the basis for the statistics and commenting available in Cumulus, and can serve as the foundation for new capabilities. For more information on Table fields, contact Canto.

Field Formulas

Cumulus field values can be determined by formulas that are authored as part of a field's properties. A formula can be as simple as the concatenation of two field values into a single string, or as complex as if-then decision making.

Formulas can be assigned to record and category fields. Values for existing records and categories are calculated (or recalculated) when the record or category's metadata is saved after an edit. Formulas are executed during cataloging operations for newly created asset records and categories.

Field formulas offer many significant benefits:

Metadata display versatility Used in conjunction with "display only" metadata fields you add to your catalogs, field formulas enable you to provide users with data displays formatted in more meaningful ways.

Example: A video's Duration field might contain the value "25.566." Even when displayed using the field's label, the user sees "Duration: 25.566," which could be

more clear. A simple field formula can round that value and display it with adjacent strings that tell a more complete story: "Length: 26 seconds."

This also permits you to do away with including field name labels in thumbnail views by adding labels only to the fields that need them. In the image shown, neither the asset record name (top) nor the format field (bottom) require field name labels because their values make clear what the field is used for. By using a formula to make the Duration field's value more clear, three lines of vertical space are saved that would ordinarily be required for field names.

Another usage example would be to combine the values of the fields *Horizontal Pixels*, *Vertical Pixels* and the appropriate resolution field to provide a single line of commonly used information:

"2400 x 1200 @ 300 DPI"

This single formula, applied to the properties of a string field you add to your catalog, saves you a full 5 lines of vertical space in your thumbnail display. The added string field ensures that each field's original value remains intact.

Calculations Field values can be calculated to provide useful, searchable metadata values that would not otherwise exist in your catalogs without manual data entry. Example: say you have a field for *Cost Per Use*. Another field, *Times Used*, tracks how many times you've used the particular asset. A third field, *Total Cost of Use*, uses a simple multiplication formula to offer a sum of the total costs associated with the asset.

Workflow monitoring and guidance Field formulas can also set values in asset records that are later used as "flags" by managers, Live Filtering or Scheduler actions for further consideration.

Metadata Write-back Flexibility The flexibility of the Cumulus architecture makes it possible (and easy) to use metadata taxonomies and field types that cannot be written back to assets because of the "string only" limitation of most metadata standards. You can circumvent this limitation in many cases by using formulas in conjunction with Cumulus's Field Linking. By adding special "metadata write back" fields to your catalogs, you can add formulas that concatenate the contents of several fields (or fields with data types incompatible with write-back operations, such as string lists) and "field link" them for write-back to your assets.

Category information not conventionally available Categories don't have automatic creation or modification date fields associated with them. In addition, there is no conventional way to determine which user created a category, or last modified its metadata. Field formulas make it possible (and easy) to track all this information and more.

Generate printer-friendly reports Setting up formula-filled fields that you use on print templates offers you a great way to output metadata in formats suitable for review by others. Formulas enable you to combine metadata fields that would otherwise be "report hostile," such as string lists, Booleans, and labels and ratings, into strings that fit nicely onto printed pages. Formulas also enable you to manipulate metadata that you intend to export from Cumulus for use in other systems.

Syntax Overview

A field formula is an expression that returns a single value, which can be of type *number, real, boolean, string, date, date only* or *time only*. The constant value *null* can also be returned to represent an empty field value.

When applying operators on two values of different types, one or both values are converted into a compatible type. Example: ("Cumulus" + 7.5) results in the string "Cumulus 7.5" because 7.5 is converted to a string before the + operator is applied.

If an error occurs, the field's value is set according to settings you determine while authoring the formula. (See "Multiplying the values of two catalog fields," below, for details.) If no error occurs, the resulting value is automatically converted to match the field's type.

The arithmetic operators available are a subset of those available in programming languages such as C, Java, or Java Script.

Formal Syntax

```
expression = bool_expression [ "?" expression ":" expression ]
bool_expression = { "!" bool_expression } | { comparison [ { "||" | "&&" } bool_expression ] }

comparison = expression { "<" | "<=" | "==" | "!=" | ">=" | ">=" | ">" } expression

calculation = expression { "+" | "-" | "*" | "/" | "%" } expression

factor = function | value | true | false

function = identifier "(" [param [ "," param ] ] ")"
```

Function Reference

The Cumulus formula editor includes an in-line help reference that describes each function and how it can be used. The functions available may increase with each release of the software, so to be sure the information available is up to date, no function overview is provided in this guide.

See "In-line Help," below, for details.

Formula Examples

The following formula examples rely on specific catalog fields. If using these formulas in your catalogs, make sure you substitute the same field names with fields from your own catalogs.

Adding text labels, formatting output and rounding numeric values

Catalog field: disp_Duration (String)

```
"Length: " + String(fieldValue("Duration") , "%.1f")+ " seconds" Duration field value: 3.467
```

Output: "Length: 3.5 seconds"

This formula takes the *real* value in the catalog's Duration field, rounds it to a single decimal place, and surrounds the resulting value with text strings.

The "%.1f" portion of this formula will be familiar to those who have worked with the printf function available in many programming languages. Cumulus supports the following printf formatting options:

Data Type	Supported	Example
String	S	%-20.20s
Integer	d, I, o, u, x, X	%d
Real	e, E, f, g, G	%5.2f

In addition, you may use the new line escape character "\n" within a string to force a line break where needed:

```
"Vertical: " + fieldvalue("Vertical Pixels") + "\n" + "Horizontal: " + fieldvalue("Horizontal Pixels")
```

Multiplying the values of two catalog fields

Catalog field: disp_Megapixels (String)

fieldvalue("Horizontal Pixels") * fieldvalue("Vertical Pixels") /
(1024*1024) + " megapixels"

Horizontal Pixels field value: 3456 Vertical Pixels field value: 2304

Output: "7 megapixels"

This formula multiples the values of the Horizontal Pixel and Vertical Pixel fields, divides that value by 1,048,576 in order to get the number of megapixels in an image, and appends that value with a text string that describes the result.

If-then decision making

Catalog field: disp_Orientation (String)

(fieldvalue("Horizontal Pixel") == null || fieldvalue("Vertical Pixel")
== null) ? "N/A" : ((fieldvalue("Horizontal Pixel") >
fieldvalue("Vertical Pixel")) ? "Landscape" : (fieldvalue("Horizontal Pixel") < fieldvalue("Vertical Pixel") ? "Portrait" : "Square"))</pre>

Horizontal Pixels field value: 2400 Vertical Pixels field value: 1200

Output: "Landscape"

This formula compares values found in the Horizontal Pixel and Vertical Pixel fields. If the Horizontal Pixel value is larger, the image is determined to be "Landscape." If smaller, it's "Portrait." If the two values are the same, the image is "Square."

The Field Formula Editor

The field formula editor can be found under the Field Values tab of both the Category and Record Field Properties windows.

When using a field formula, a field's value cannot be edited directly by users. For this reason, the window uses radio buttons to permit either "user generated" or "formula based" values.

The main text area of the formula editor is where you'll define your formulas. The interface elements of the editor are:

Formula Editor 1 The formula editing field 2 List containing all catalog fields 3 List containing all functions 4 Option for not changing field value on formula error

- 5 Option for clearing field value on formula
- 6 Option for using a fallback string value on formula error



Construct your formulas in the text field provided. Take advantage of the Fields and Functions drop-down lists to save time and help you avoid syntax errors introduced by simple typos.

Choose your preferred option for error handling. An error occurs when for whatever reason your formula cannot be executed. Errors can include syntax issues in the formula itself, or problems evaluating field data used in the formula.

When you click **OK** to dismiss the Field Properties window, your formula is saved and activated.

NOTE: The order in which fields are calculated cannot be determined absolutely. For this reason, take care when creating formulas that are dependent on other field values also based on formulas. If needed, consider "wrapping" one field's formula into the formula of another field, thereby forcing the order of calculation. Example:

```
Field "A" formula: fieldvalue("B") * 1.5

Field "B" formula: fieldvalue("Image Height") + 3.0

This may result in unexpected results if field "A" is evaluated before field "B". The solution is to include the field "B" formula in the formula of field "A":

Field "A" formula: (fieldvalue("Image Height") + 3.0) * 1.5
```

In-line Help

An in-line function and syntax reference is built into the formula editor. This feature provides a handy reference that will save you time and help you avoid syntax errors.

Three types of in-line help are available:

- Syntax reference See an example of the syntax used with a function.
- Usage reference See information about the purpose of a function, the value it returns, and a usage example.
- Autocompletion See a menu list of functions whose names match characters you've typed.

To activate in-line help:



- 1. Click to place your cursor within the function's name in the formula editing field
- 2. Type CTRL p (syntax reference) or CTRL q (usage reference). The usage reference help window that appears may be resized as needed.
 - Both windows disappear when another key is pressed or the mouse is clicked in the Formula editing field itself. (Hint: Escape, Shift, CTRL or ALT are good keys to use to dismiss the window because they don't introduce any new characters into the Formula field.)
- 3. For function name autocomplete assistance, type the first few characters of a function's name and press CTRL-Spacebar to see a list of functions whose names match the characters you've typed.

Field Linking

Some asset formats (e.g., JPEG) can store metadata. Cumulus can read, store and manage this metadata by linking it to record fields. The record fields are provided by the Cumulus application, the Asset Storage modules, Metadata modules, and the filters.

You can decide when the linking should happen (when cataloging assets and/ or updating records), and whether changes to the metadata should be written back to the asset. Changed metadata can only be written back if this function is supported by the file format, the filter and Asset Storage module used for accessing the asset.

If the record field's type is String, you can also decide whether the linking applies to all or only the first matching asset field. If the **Read All** option is activated, the values of the linked fields are read consecutively. Under **Link Matching Fields**, all fields which "feed" the field are listed – fields that have the same GUID (Globally Unique Identifier) or name and type. If the **Read All** option is activated, Cumulus

will fill the record field with the data from all activated modules. If a module is deactivated, its data are "ignored" by Cumulus.

NOTE: Field Linking Checks for Field Types

In addition to its own type, a field may be linked to certain other field types only.

- Integer fields accept: String, Boolean, Real
- Real fields accept: String, Boolean, Integer
- Boolean fields accept: String, Integer, Real
- Date fields accept: String
- String List fields accept: String
- String fields accept: Boolean (true, false), Integer, Real, Date, String List (exact string matching)
- Binary fields accept: Audio, Picture

Automatic Creation of Folder Categories

The fields linked to Categories record field are responsible for the automatic creation of folder categories in a catalog Under which tab (master category) such a folder category is created, is defined under **Category Target**. You can change the default target by clicking into the field and selecting another tab..

If you don't want automatically created folder categories in a catalog, you have to deactivate the corresponding modules.

To avoid the automatic creation of folder categories you have to change the default linking of the **Categories** field:



- 1. Make sure the collection window containing the catalog is the active window in Cumulus.
- 2. Select **©** Cumulus / **B** Edit > Preferences.
- 3. Click Catalog Settings.

The Catalog Settings window is displayed. If the active collection window contains more than one catalog, select the catalog you want to edit under **Catalogs**.

- 4. Click Record Fields.
- 5. Select the field named **Categories** and click the **Properties** button.
- 6. Click Field Linking.
- 7. Select the module which to be deactivated (the one that should not create categories during the cataloging process. e.g. Windows or Mac OS File System AssetStore).
- 8. Click Deactivate.
- 9. Click **OK**. This brings you back to the fields list.
- 10. Click **Apply** to save your changes. If you now catalog assets employing this module, no directory categories will be automatically created and assigned to the record.

Adding Fields

To store information in addition to or different from the default settings, you can add fields to the catalog either by activating them from the list of fields that Cumulus supports or by defining a custom field.

To add a record or category field:



- Make sure the collection window containing the catalog is the active window in Cumulus.
- 2. Select Cumulus / Edit > Preferences.
- 3. Click Catalog Settings.

The Catalog Settings window is displayed. If the active collection window contains more than one catalog, select the catalog you want to edit under **Catalogs**.

- 4. Click **Record Fields** or **Category Fields**. This displays a list of the current record or category fields included in the catalog.
- 5. Click the **Add Field** button. This opens the dialog **Add Field**.

This dialog provides three tabs. Two of them can be used to add fields that Cumulus supports, but that are not currently in the catalog. You can either select the field to be added from an alphabetically sorted list or from a tree structure that lists the fields sorted by the module that provide the fields.

- The Modules tab, displaying nodes: Catalogs, Catalog Templates, Modules and Languages.
 - The **Catalogs** nodes expands to a list of all catalogs open in the active collection. Clicking the plus sign in front of a catalog's name displays all fields of that catalog that are not included in the catalog you want to edit. Either select the name of a catalog to add all contained fields, or select the individual fields you want to add.

NOTE: If the Catalog node includes the catalog that you are editing itself, this catalog contains table fields (e.g. Asset Usage History). Table fields introduce a second level into the catalog, as they themselves contain fields, which may or may not be contained in the top level, or in any other table field, too. At any level of the catalog – top level or table field level – the Catalog node offers the fields, that in fact belong to this catalog, but not to the current level.

- The **Catalog Templates** nodes expands to a list of all available catalog templates. Clicking the plus sign in front of a catalog's name displays all fields of that catalog template that are not included in the catalog you want to edit. Either select the name of a catalog template to add all contained fields, or select the individual fields you want to add.
- The **Modules** node expands to a list of all Cumulus modules that provide fields. Clicking the plus sign in front of a module's name displays the fields supported by the respective module that are not included in the catalog you want to edit. Either select the name of a module to add all fields supported by that module, or select the individual fields you want to add.
- The **Languages** node expands to a list of all languages configured for string field values. Clicking the plus sign in front of a language name displays the fields that support values in the respective language that are not included in the catalog you want to edit. Either select the name of a language's to add all respective fields, or select individual fields to be added. Additionally, all language independent fields that are not included in the catalog are listed and can be added.
- The **Fields** tab displays a list of all the fields that are not yet included in the catalog.

The third tab, the **Custom Field** tab, enables you to define your own custom fields so you can store information in addition to fields that Cumulus supports. See "Creating a Custom Field," below, for details.

- 6. Select the field(s) you want to add.
- 7. Click **OK**. This brings you back to the fields list.
- 8. Click **Apply** to save your changes.

NOTE: If you want this field to be shown in a view, you have to customize the corresponding view set and add this field. (See "Adding a Field to a Record View," p. 107, for details.)

Creating a Custom Field

To set up a catalog to store information in addition to fields that Cumulus supports, you can define your own custom fields.

NOTE: Same Custom Field for Multiple Catalogs

If you have created a custom field for one catalog, you can easily copy this field to another catalog. If multiple catalogs are opened in the same window, Cumulus will display the custom record fields of all these open catalogs in the list of the Fields tab. You can select a custom field of another catalog and add it to the current catalog. We recommend using this way of adding the same custom field to several catalogs, as only then will the field have the same GUID (Globally Unique Identifier) in different catalogs. And only when the GUID is the same, a custom field can be used for searching in different catalogs. Another advantage is that fields of the type String List already include the entries that have been made.

To add a custom field:



- Make sure the collection window containing the catalog is the active window in Cumulus.
- 2. Select **©** Cumulus / ∄ Edit > Preferences.
- 3. Click Catalog Settings.

The Catalog Settings window is displayed. If the active collection window contains more than one catalog, select the catalog you want to edit under **Catalogs**.

- 4. Click **Record Fields** or **Category Fields**. This displays a list of the current record or category fields included in the catalog.
- Click the Add Field button. This brings up a dialog in which you can add a new field.
- 6. Click the **Custom Field** tab.
- 7. Enter a name for the field and select the type of field. (See "Field Types," p. 19, for information on field types.)
- 8. Click **OK**. The new field is added to the list of fields included in the catalog.
- 9. Define the field properties.
 - In the list you can activate certain options
 - Sorting
 - Contain Search
 - User Editable: If this is not checked, the field contents cannot be modified.
 - In the Field Properties dialog you can define more options for the field. Select the field's entry in the list and click the **Properties** button. The options available from the Field Properties dialog depend on the field type. For details, see "Overview: Field Properties," p. 147.

- 10. Click **OK** to close the Field Properties window. This brings you back to the fields list.
- 11. Click **Apply** to save your changes.

If you want this field to be shown in a view, you have to customize the corresponding view set and add this field. (See "Adding a Field to a Record View," p. 107, for details.)

Editing a String List Field

To edit the entries of a String List field, the Field Properties dialog for the field must be displayed. The String List Editor tab lets you view and edit the terms of the selected String List.

Each term has an ID and can be stored in multiple languages. This is only important when working in a multilingual environment. If you want users who open the catalog with another language version of Cumulus to see the term in this language, you have to store the translation of this term. Depending on the language version of Cumulus, the term in the corresponding column will be displayed.

The String List Editor tab lets you edit an existing entry, add a new term or delete an existing term by using the corresponding buttons. Save any changes you make with the **OK** button of Field Properties window. They are valid as soon as you click the **Apply** button to save your Catalog Settings.

To edit a term of a String List field, just select its entry in the list and double-click the term you want to edit.

To create a new term for a String List field:



- 1. Click Add.
- 2. Enter the new term in the dialog that appears and click **OK**. The new term appears in each language field of the list.

If you are working in a multilingual environment, you can now double-click the field for a language and enter the translation for the term. A user will only have the terms of one language displayed. The language a user gets displayed initially depends on the language defined during the installation, but can be changed by the user anytime.

You can edit a term of a String List field at any time:



- 1. Select the entry for the term you wish to edit.
- 2. Double-click the term in the language you want to edit in and type the new term in the field.

The term will be changed in all records that use it when you have saved the changes and closed the Properties window.

You can define the sorting of the terms of a String List field. You can select different sorting modes for a String List field:

- Alphabetical (default sorting mode)
 The terms of the String List field will be displayed sorted alphabetically according to the rules of the language of the application (e.g the Cumulus Client). This sorting mode is useful for e.g. keywords.
- Content

The terms of the String List field will be displayed as sorted in this list – independent from the language defined for the user. This sorting mode is useful

for e.g. status descriptions. Use the arrow buttons to the right of the list to change the order of the entries.

Language Specific

This mode allows you to define different sort orders for different languages. This sorting mode is useful for e.g. country selection where depending on language, different countries should appear on top of the list.

The sorting mode displayed for the String List field in the Select Mode field is the active mode, once you click **OK** for the Field Properties dialog.

If you want to define a sorting mode other than alphabetical:



- 1. Select the Sorting Mode.
- 2. In case you decided on the Content sorting mode, use the arrow button on the right to define the order of the terms.
- 3. In case you decided on the Language Specific sorting mode, select a language and then use the arrow button on the right to define the display order of the terms of the selected language. Repeat this for each language.

You can delete an entry that you no longer need and replace it with another entry.

To delete an entry:



- 1. Select the entry you wish to delete.
- 2. Click Remove.

Cumulus prompts you to assign a new entry to those records or categories and displays a list of terms (in the language that is defined for you as Cumulus user).

3. Select a replacement entry from the list and click **OK**. The new entry is assigned to all records previously associated with the deleted entry. This may take a while, depending on the number of records that require reassignment.

Securing Catalogs

To prevent an unforeseen technical mishap from damaging or destroying your catalogs you should have a strategy. Cumulus offers the following mechanisms to preserve catalog data in case of a failure:

- Backing up
- Journaling

Canto recommends you to backup your catalogs regularly and in addition, to avoid losing changes made to a catalog after the most recent backup, employ *either* catalog journaling *or* mirroring as a second mechanism. Which mechanism is best depends on your needs.

The advantage of *journaling* is that you can immediately continue working after a failure.

Journaling Catalogs

Journaling Cumulus catalogs improves data security. A journaling catalog logs changes to a journal (special circular log files) before actually writing them to the catalog. Such a journal is used to repair any inconsistencies that occur as a result

of an improper shutdown. In the event of an improper shutdown, a given set of changes may have either been fully committed to the catalog (i.e., written to the hard disk), in which case there is no problem, or the changes will have been marked as not yet fully committed, in which case the system will read the journal, which can be rolled up to the most recent point of data consistency.

SPECIAL TECH INFORMATION: Cumulus Catalog Journal

A Cumulus catalog journal consists of 5 circular log files named as the catalog file with the extension .redo. These log files are saved along with the catalog file in the same folder. Each of these files has an initial size of 20 MB and the files can become quite large. The required space differs; as rule of thumb: twice the size of the catalog file is recommended.

IMPORTANT! Copying or Moving Journaling Catalogs

When copying, moving or backing up a catalog externally, the journal of the catalog (all 5 *.redo log files) must be included, e.g. copied or moved along with the catalog file

IMPORTANT! Using Backup Files Created by Cumulus

If you want to replace a damaged catalog file of a journaling catalog with a backup file created by Cumulus, you must delete the journal of the catalog (all 5 *.redo log files) before you copy and/or rename the backup file.

You activate journaling for a catalog in the Catalog Settings (**Cumulus** / **Edit** > **Preferences** > **Catalog Settings** > **General**.)

New Catalogs

You may create as many new catalogs you need.

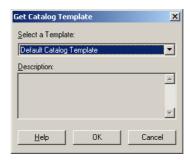
Creating Catalogs

To create a new catalog:



1. Select File > New Catalog.

If available you can use a catalog template for the new catalog.



Select the desired template and click **OK**. (For more information on catalog template, see "Catalog Templates," p. 160.)

- 2. Select a location for the new catalog and enter a name.
- 3. You can have the new catalog opened in a separate window or in the window of the current collection. Activate the desired option.
- 4. Click Save. The new catalog is opened.

Catalog Templates

You can define templates that you can use to create new catalogs, prepare existing catalogs for specific usage or even update older catalogs. There's no faster way to get new catalogs up and running, or to consistently replicate updates made to one catalog on another catalog. Create new, pre-configured image databases, video catalogs, PDF archives and more, from a single menu item – no more redundant catalog tweaking necessary!

Creating and Editing a Catalog Template

To create a new Catalog Template you can save the settings of an existing catalog as Catalog Template or duplicate a template.

To create a new Catalog Template by duplicating an existing one and adapting its settings:



- 2. Click Catalog Templates.
- 3. Under **Template**, select the Catalog Template to be used as a basis for the new one.
- 4. Click the **Duplicate** button. The **Name and Settings** dialog opens.
- 5. Enter a name for the new template, and optionally
 - Activate the Allow Sharing option, if you want this view set to be available
 to other users.
 - Activate Copy display names only, if you also want to take over the language-specific display names from the original (not recommended for new catalog templates).
 - Activate Copy description only, if you also want to take over the descriptions specified for other languages from the original (not recommended for new catalog templates).
- 6. Click **OK**. The Catalog Template window is displayed.
- 7. Define the new Catalog Template.
- 8. Click **Apply** to save your changes.

To create a new Catalog Template by saving the settings of an existing catalog as Catalog Template:



- 1. Select **Cumulus** / **Edit** > **Preferences**.
- 2. Click Catalog Settings.
- 3. Under **Catalog**, select the Catalog to be used as a basis for the new Catalog Template.
- 4. Click the **Save as Catalog Template** button. The **Name and Settings** dialog opens.
- 5. Enter a name for the new template, and optionally
 - Activate the Allow Sharing option, if you want this view set to be available
 to other users.
 - Leave **Copy display names** activated, if want to take over the display names specified for other languages from the original.
 - Leave Copy description activated, if you want to take over the descriptions specified for other languages from the original

6. Click OK.

To change an existing Catalog Template:



- 1. Select **©** Cumulus / **B** Edit > Preferences.
- 2. Click Catalog Templates.
- 3. Under **Template**, select the template you want to edit. The settings for the selected template are displayed in the Catalog Template window.
- 4. Make your changes.
- 5. Click **Apply** to save your changes.

The Catalog Template Window

The Catalog Template window controls several important factors that come into play while managing assets. The options are divided into the following sections:

- General Options for Catalog Templates
 - Keep Category Names Unique Prevents the creation of new categories that share names with existing categories.
 - **Use Journaling** Activates journaling for the catalog. (See "Journaling Catalogs," p. 158)
 - Use Template for Catalog Creation Makes the template appear in the Get Catalog Template dialog when creating a new catalog. So do not activate this option, if you want to use a Catalog Template for preparing other catalogs only.
- Record Fields Displays the record fields that a new catalog will contain. You
 can add or delete fields and customize selected fields. This allows you to
 organize the information that can be stored on an asset in its record. Remember, metadata retrieved from assets while cataloging can only be stored if the
 corresponding record fields are included in the catalog. For details on how to
 add and configure record fields, see the corresponding descriptions in the
 chapter "Catalog Settings," p. 142.
- Category Fields Displays the category fields that a new catalog will contain.
 You can add or delete fields and customize the fields. For details on how to
 add and configure category fields, see the corresponding descriptions in the
 chapter "Catalog Settings," p. 142.

TIP: Using Catalog Templates to Update Older Catalogs

You can use Catalog Templates to provide specific catalog fields for other catalogs. When adding fields to a catalog, click on Modules and you are also offered the fields of Catalog Templates.

Catalog Maintenance

Taking regular care of your catalogs ensures not only the best performance, but also your data security.

Catalog Size and Performance

The biggest factor affecting catalog size is the number of records in the catalog. There is no hard limit on the number of records that a catalog can hold, but catalog files cannot be larger than four gigabytes (e.g. Enterprise) /one terabyte in size (e.g. standard Workgroup).

As multiple catalogs can be opened in one window, an advantage of this is that it makes it easier to search for an asset. The beauty of smaller catalogs is that, the time required to repair, restructure or reorganize a catalog is reduced tremendously. Furthermore, if a particular catalog is being repaired or restructured, the assets in the other catalogs will be unaffected and can still be accessed. Search times, however, are not affected by catalog size.

Record Size

The actual number of records you can fit into the catalog size limit depends on the individual records' sizes. Factors that determine a record's size include:

- The type of asset the record represents. Different asset types have different information that needs to be stored to identify them, so their records use varying amounts of catalog space. For example, a video clip uses space for frame rate and total frame number fields that a simple image doesn't require.
- The amount of text in the record's Notes field. All those characters in the Notes field have to be stored somewhere! If you add 1k worth of text, you add 1k to the record size. Multiply that times a thousand or so records and you have added an entire megabyte to your catalog's size.
- The record's thumbnail size and quality. Larger and higher quality thumbnail images take up more space. (See "User Settings," p. 100, and "Catalog Settings," p. 142, for information on thumbnail settings.)

Typically, your catalogs will never reach the maximum size. If they do, you'll need to divide them. (See "Dividing Catalogs," p. 165.)

Speeding Up Cataloging

As a catalog grows, the time required to catalog new assets increases. There are a few tricks for Asset Handling Sets that you can do to increase performance when cataloging large amounts of assets at once:

- Choose Catalog Duplicates on the Cataloging tab. This option prevents
 Cumulus from having to "think" too much about what it is cataloging. (See
 "Overview: Asset Handling Sets," p. 115, for details.)
- Deactivate any asset formats that you don't need. (See "Asset Format Support," p. 122, for details.)

Compressing Catalogs

Compressing a catalog when it comes close to its maximum size. You can check the actual and maximum catalog size in the Catalogs Settings.

NOTE: Deleted Records in Cumulus versions prior to 8

When records are deleted from catalogs, with Cumulus versions prior to 8 they could optionally remain a part of the catalog in case you need to retrieve them. These not-quite deleted records take up space. You can delete them permanently by compressing the catalog.

To compress a catalog:



- 1. Make sure the catalog you want to compress is the active window in Cumulus. If you have more than one catalog opened in the active window, you will be asked to select the catalog.
- 2. Select File > Administration > Compress Catalog. (Only active if the catalog is not yet compressed as much as possible.) You are warned that compressing the catalog will permanently remove the deleted records.

3. Click **OK** to compress the catalog.

Backing Up Catalogs

The value and usefulness of a Cumulus catalog increases exponentially as the catalog grows. To prevent an unforeseen technical mishap from damaging or destroying your catalogs (and your work schedule), consider regular and frequent backups.

It's important to remember that backing up a Cumulus catalog *does not* back up the catalog records' associated asset files. Make sure that all your important files are included in your regular backups.

There are different ways of backing up a catalog:

- Any backup software program
- With the Cumulus Backup feature

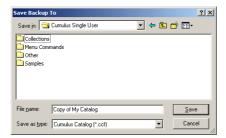
The first way may be the quickest and most convenient, particularly if you already use a backup software program. A Cumulus catalog, being just another file on your computer, can be copied to other volumes, or included in a network or automated backup. Catalogs should be closed before they are copied to other volumes to ensure that all changes are safely saved. However, you can back up an open catalog, if you employ the Cumulus Backup feature.

To back up a catalog using the **Backup** feature with Single User:



- 1. Make sure the catalog you want to back up is the active window in Cumulus. If you have more than one catalog opened in the active window, you will be asked to select the catalog.
- 2. Select File > Administration > Backup Catalog. The Backup window opens.
- 3. Select a location for the backup and enter a name.

The name for the backup catalog file defaults to the same name as the original catalog file with the file name extension *.bak*. You may also choose the file name extension *.ccf.* There is no difference in format, but then you may need to choose a different name or a special backup location to avoid confusions with the original catalog.



4. Click **Save**. The catalog is saved to disk.

Preparing Catalogs for Special Metadata

If you want to capture IPTC, XMP or EXIF data from assets (and to write back such data to assets), the catalog(s) managing these assets and the Asset Handling Set(s) to be used must be prepared. Cumulus provides special functions for this.

File > Administration > Prepare Catalog opens a submenu with options for preparing catalogs to manage different standard metadata formats. For more details, see "Prepare Catalog," p. 176.

Copying Catalogs

The Backup function described above is Cumulus' mechanism for copying catalogs in their ready-to-use state. You can also use the conventional ways of copying files on your computing platform to make copies of Cumulus catalogs. Remember, copying catalogs does not copy the associated asset files.

Repairing Catalogs

If a catalog becomes damaged, Cumulus may be able to rebuild it. When you try to open a damaged catalog, Cumulus asks to repair it. You can also initiate the repair process for local catalogs from within the program by selecting **File** > **Administration** > **Rebuild Catalog**.

Catalogs are most commonly damaged by power failures or shutting off the power to your computer while a catalog is open. (Selecting the standard **Shut Down** menu item to turn off your computer is safe, even when a catalog is open.)

Renaming Catalogs

Cumulus catalogs actually have two names:

- One is the name of the catalog file, as you see it from your computer's desktop. This is called the catalog file name.
- The other is the name of the catalog, as seen in the catalog window's title bar. This is simply called the catalog name.

When a catalog is first created, the catalog name defaults to the same name as the catalog file. Newly created catalogs are named the same as their file names by default, but the catalog name can be changed at any time.

To change a catalog name (what you see in the catalog window):



- 1. Make sure the collection window containing the catalog is the active window in Cumulus.
- 2. Select **(Cumulus /)** Edit > Preferences.
- 3. Click Catalog Settings.

The Catalog Settings window is displayed. If the active collection window contains more than one catalog, select the catalog you want to edit under **Catalogs**.

- 4. Click General. You'll see a field labeled Name.
- 5. Enter a new name for the catalog in the **Name** field and click **OK**. The change is saved and the window closes.

You change a catalog's file name (what you see from your computer's desktop) as you would any other file.

Deleting Catalogs

Unlike deleting records, deleting catalogs is not undoable. (Unless you have a disk utility program that makes recovering deleted files possible.) Cumulus has no built-in mechanism for deleting catalogs. Delete catalogs as you would any

other file on your computer. Remember that assets are not deleted with catalogs. Catalogs must be closed to be deleted.

Dividing Catalogs

At some point you may wish to divide the contents of one catalog into smaller catalogs. Reasons for doing so include:

- The catalog has grown close to its maximum size (e.g. 4 gigabytes).
- Your computer can no longer accommodate the number of records in the catalog effectively (processor or RAM limitations).
- The contents of the catalog have become too diverse to be usefully categorized in one catalog.

Like many operations in Cumulus, there is more than one way to divide a catalog. The first way is best suited to smaller numbers of records.

To divide a catalog using drag and drop:



- 1. Make sure the catalog from which you wish to divide is the active window in Cumulus.
- 2. Create or open the catalog you wish to move records into in a separate window. Arrange the catalog windows so that you can see both.
- 3. Search for the records you wish to move to the new catalog, using any of Cumulus' search options. (See "Searching," p. 32.)
- 4. Click on or near a thumbnail in the original catalog and select Edit > Select All to select the records. (At this point you could cut and paste the records between the catalogs as one way of moving them, which would save you the step of deleting the old records in the old catalog.)
- 5. Click on the thumbnail of any of the selected records and drag the set into the new catalog window. The records are copied. The copied records' categories are created in the new catalog.

NOTE: Cumulus doesn't consider copying records from one catalog to another as "cataloging assets." Therefore, the Asset Handling Sets have no effect on this action.

6. You can optionally delete the records from the old catalog by first clicking on the old catalog's window to activate it, and then selecting **Edit** > **Delete** before the selection of records has changed.

Migrating Catalogs

Catalogs from versions prior to Cumulus 6 cannot be migrated within Cumulus 8. If you need to migrate Catalogs from versions prior to Cumulus 6, please contact your Cumulus support.

When you first open a Cumulus 6 or 7 catalog with Cumulus 8, it is prepared to be used with Cumulus 8. You can immediately start working with it. However, you need to explicitly migrate a Cumulus 6 or 7 catalog file to Cumulus 8 if

Integer or Long Integer field values are used for sorting

A catalog's type and size can be viewed in its Catalog Settings window

(Cumulus / ☐ Edit > Preferences > Catalog Settings > General tab.)

Catalogs created with Cumulus 6 or 7 can be easily migrated to Cumulus . However, Canto recommends you always make a backup catalog and then use this backup version of the catalog for migration.

To migrate a Cumulus 6 or 7 catalog:



- 1. Select File > Administration > Migrate Catalog. A dialog for selecting a catalog appears.
- 2. Select the Cumulus catalog you want to migrate and click **Open**.
- Select a name and location for the migrated Cumulus catalog and click Save. A progress bar appears to indicate the status of the conversion.
 Once the progress bar disappears, your catalog has been migrated to the current Cumulus catalog format and saved in the location you selected.

NOTE: If problems occur during a catalog migration, try repairing the catalog using your former Cumulus version. Choose the Repair option under the Administration menu and then try the migration again.

Archiving Information

Many organizations maintain several catalogs: one catalog for production assets and a second catalog to manage archives. With Cumulus you can also take your assets off-line, update the file references, and still be able to search and retrieve them.

In general, archiving assets involves the following steps:



- 1. Copy and/or move the assets you wish to archive to the other media.
- 2. Merge the records you wish to archive into an archival catalog by first copying the categories and then the records.
- 3. Update all asset references in the archive catalog.
- 4. If desired, delete the records you archived from your production catalog.

The Importance of Updating Asset References

Cumulus tracks the location of media assets through *asset references*. Whenever you move an asset, you must update the asset reference to reflect the new location.

About Archiving on CD-ROM

Like other read-only media, creating an archive on CD-ROM requires that all information be set up correctly in advance. When creating archives on CD-ROM, remember the following:

- Create a temporary "staging" volume/drive and give it the same name as the final CD-ROM disc.
- Copy and/or move the catalogs and assets you wish to archive to the staging volume/drive.
- Update all file references. The file references within each record must point to the assets located on the staging volume/drive.

Burn a new CD that contains the contents of the temporary volume/drive.
 Remember that the CD must have the same name as the staging volume/drive.

Creating Hybrid CD-ROMs

Differences between the Windows and Mac OS operating systems present some distinct challenges when archiving to external media such as CD-ROM. To avoid problems in locating information on hybrid CD-ROMs, remember to use one of the following file system combinations:

- a hybrid CD-ROM containing an ISO 9660 file system with Joliet extension as well as a Mac OS HFS file system
- an ISO 9660 CD-ROM without extensions

Because of operating system naming restrictions, the use of other file system combinations can lead to problems when finding files on either platform.



This section serves as a road map to the entire Cumulus product from the perspective of the user interface. Explanations are given for each of the program's menus and toolbars.

Menu Reference

★ The Cumulus Menu

About Cumulus

Displays a dialog that shows the version of Cumulus you're using. It also provides a button that launches your default Web browser and initiates a connection to the Canto Website. This requires an Internet connection.

Preferences

Opens the Preferences window, from which you can set all preferences. (See "Customize Cumulus," p. 99, for details.)

Quit Cumulus

Quits Cumulus.

The File Menu

New Catalog

Creates a new catalog. If available you can use a catalog template for the new catalog. (For more information see "Catalog Templates," p. 160.) A dialog is displayed for you to name the new catalog and choose a location for saving it. Then you can have the new catalog opened in a separate window or in the window of the current collection. Activate the desired option.

Open Catalog

Opens a dialog that lets browse for a catalog file.

When opening a catalog you either open it in a separate window or in the window of the current collection. Activate the desired option.

Open Recent Catalog

Opens a submenu that lists all catalogs opened recently. Selecting the entry for a catalog will open it. The submenu also includes an entry that allows you to clear the list of recently opened catalogs.

Close

Closes the active window, e.g. the Collection, Preview, Record or Category Information window.

New Collection

Opens a submenu with two options for creating a new collection:

- From Selection The new collection will contain the currently selected records.
- Empty The new collection will be empty.

For more information on collections see "Collections," p. 16.

Open Collection

Opens a dialog to choose one of the collections you saved. For more information on collections see "Collections," p. 16.

Save Collection

Saves the collection as it is shown.

For more information on collections see "Collections," p. 16.

Save Collection As

Saves the collection as it is shown under a new name. A dialog is displayed for you to name the new collection. Enter a name for the collection and if you want the collection to be available for other users, activate the **Share Collection** option.

For more information on collections see "Collections," p. 16.

wsCopy URL for Other Purposes

Add Catalog to Collection

Opens a dialog to select another catalog to be opened within the current collection.

For more information on collections see "Collections," p. 16.

Remove Catalog from Collection

Opens a dialog which lists the open catalogs and lets you choose the catalog to be removed from the current collection.

For more information on collections see "Collections," p. 16.

Save

Saves any changes depending on the active window; e.g. the Record or Category Information window.

Add Assets to Catalog

Open a submenu with following menu options:

Browse for Assets... Ctrl+B Recatalog Category Folder Setup Auto Cataloging...

Browse for Assets

Opens a dialog in which you can browse for assets you want to add to a catalog (in Cumulus-speak: you want to "catalog".) Depending on your individual settings several options for cataloging might be offered to you before the dialog for selecting the assets is opened.

BACKGROUND INFORMATION:

"Cataloging assets" is Cumulus-speak for adding media files to your catalog. There are several ways to catalog assets: via menu item, context menu and with drag and drop. As you catalog your assets, Cumulus creates special catalog entries called *records* that represent the assets to be managed. Each record contains vital searchable information about the asset it represents.

How Cumulus deals with your assets during the cataloging process depends on the Asset Handling Set used. *Asset Handling Sets* define many aspect of asset handling, including which Asset Stores and Filters should be used, where the assets should be stored when cataloged, and which metadata template (if any) should be automatically applied.

TIP: Cataloging Asset via Drag & Drop

You also catalog assets by dragging them from an Explorer/Finder window into the Cumulus window.

Options While Cataloging

Several options for the cataloging process are possible – most of them depend on the selections made in your User Settings (Cumulus / Edit > Preferences > User Settings > General or Asset Handling.)

Showing Progress Dialog

If activated in the User Settings, a progress dialog is shown while Cumulus is cataloging the assets. With Cumulus, you can have multiple cataloging processes running simultaneously and you can go on working with Cumulus while cataloging. With a Cumulus Client under Mac OS X you see an icon for each of the processes.

Selecting Asset Handling Set

If you have activated the option **Show dialog when cataloging** in the Asset Handling section of your User Settings, you will be prompted to select an Asset Handling Set for each cataloging process.

Make sure the selected Asset Handling Set fits to the catalog you want to add the assets to.

In the list of Asset Handling Sets, you can use the **Customize** option to access the preferences of the selected Asset Handling Set. (See "Overview: Asset Handling Sets," p. 115 for details on how to set up Asset Handling Sets.)

Selecting Catalog

If you have multiple catalogs open in one window, you are prompted to select the catalog to which you want to add the assets.

If you have activated the option **Show dialog while cataloging** in your User Settings *and* have multiple catalogs open in one window you are prompted to select the catalog to which you want to add the assets and select an Asset Handling Set for this cataloging process. Make sure the selected catalog and the selected Asset Handling Set match.

Employing the Metadata Editor

If the Asset Handling Set you use, has the Show Metadata Editor for New Records activated, a dialog is displayed when cataloging assets. It allows you to add metadata information to the records of those assets you are just cataloging. (The fields

displayed depend on the Record View Set that was selected for the Metadata Editor in the settings of the Asset Handling Set.) You can use a Metadata Template and/or manually enter metadata information.

If you don't want to add any of your own information to the current asset's record, select the **Skip** button.

Creating TAG Files

If you catalog assets from a location where you are allowed to save files, Cumulus can create a TAG file for each cataloged asset. The file has the same name as the asset with the extension .tag added and is saved in the folder where the asset resides. TAG files are a standard exchange file format for metadata information on the asset. TAG files hold all of the information that can be viewed in the Asset Information – and more. For example, if a particular asset has been cataloged into different catalogs, this information is part of that asset's TAG file.

If you want Cumulus to create these TAG files while cataloging, use an Asset Handling Set that has an activated asset storage module **Cumulus Metadata Support** (properties set to **Always**).

New Empty Record

Creates an empty record. Opens a Dialog where you can specify the catalog to which the record is added, as well as the Asset Handling Set to be used with the new record. You can assign metadata and an asset to such a record later on.

TIP:

To assign an asset to an empty record later on, use the **Change Asset Reference** function.

Assign Asset to Record

Only available if one – and only one – record is selected that has no asset assigned to.

Opens a dialog to select the asset to be assigned to the record. Subsequently, the asset is cataloged and assigned to the selected record. (If applicable, the asset is also copied or moved to a Central Asset Location.) Optionally – depending on what is specified for the current catalog in the User Settings – a dialog for selecting an Asset Handling Set is displayed first.

Recatalog Category Folder

Synchronizes the content of the selected folder category with the contents of the folder represented by this category. This option compares the contents of the folder and Cumulus: files that are new in the folder are automatically cataloged. (Available for folder categories only.)

Setup Auto Cataloging

Opens a dialog to define auto cataloging for the selected category. (See "Categories and Auto-cataloging," p. 27, for details.) (Available for folder categories only.)

Import

Opens a submenu with several menu options. Each opens a dialog in which you can select an appropriate file type for import. The various file types are listed by the import type below:

- Assets Lets you add assets to catalogs. After selecting an Asset Handling Set, a dialog opens to browse for the assets you want to add. For a description on how to go on see "Browse for Assets," p. 171.
- Records Lets you import records that were exported to XML files or to Cumulus Record Exchange Files. If you have multiple catalogs open in one window, you are prompted to select the catalog to which you want to import the records. The imported records are appended to the active collection.
- Categories Lets you import categories that were exported to XML files or Cumulus Category Exchange Files. If you have multiple catalogs open in one window, you are prompted to select the catalog to which you want to import the categories. The imported categories are appended to the active/selected catalog. If a category in the import file has the same name as an existing category, the category is not imported.
- Collection Lets you import collections stored with previous Cumulus versions on the computer running the Client application and collections sent to you via email. If you have multiple catalogs open in one window, you are prompted to select the catalog which you want to import the collection to.
- From Text/CSV File Lets you import metadata from text files (separated by delimiters.) As a comma is a very common delimiter, such files are also called Comma Separated Value (CSV) files. This import option enables you to import metadata from other database systems into Cumulus catalogs.

For detailed information on importing, see "Importing and Exporting," p. 70.

Export

Opens a submenu with several export options. Each opens a dialog in which you can name an appropriate file type for export. All exported files can be used on any supported Cumulus platform. The options are explained below:

- Selected Records Exports the currently selected records. (This menu item is disabled if no records are selected.)
- All Records Exports all records of the active collection. If you want to export
 all records of the catalog(s) included in the collection, you have to perform
 Find > Find All Records first.
- Selected Categories Exports the currently selected categories in the active collection. (This menu item is disabled if no categories are selected.)
- All Categories Exports all categories of the Category pane.
- Collections To store collections in any location other than the Cumulus Server.
- Mail Collection To Sends a collection via email to another user. However, don't forget: Since a collection is always connected to catalog(s), it is necessary for the recipient to have access to the catalog(s) 'serving' the collection. To make use of a collection you received via email you use the import function.

For detailed information on exporting, see "Importing and Exporting," p. 70.

Page Setup

This menu item opens a standard page setup window from which you can configure your printing options. The options available to you will depend on your system configuration. See your computer's operating system manual for details. Under Mac OS, the Preview button allows you to view the printed output before it gets sent to your printer. Under Windows, Cumulus provides a Print Preview menu item.

⊞ Print Preview

This option allows you to view the print output before it gets sent to your printer. The output options are taken from the current print settings.

Print

Opens a submenu with the following menu options:

- Selected Prints selected items (records, categories or preview sections) depending on the active window or pane.
- All Prints all items depending on the active window or pane.

The print function is context sensitive (meaning that what is printed depends on the position of the cursor). If the active window or pane is:

- the category pane, the categories (all or selected) will be printed as they appear in the Category window. Make sure to expand the category list if you want to see all the subcategories in the print out.
- the record pane and thumbnail or details view is the current view mode, the records (selected or all of the active collection) are printed using Print Templates. (For more information on Print Templates, see "Print Templates," p. 132.)
- the record pane and information view is the current view mode, the information displayed will be printed.
- an information window, the information displayed in the window will be printed.
- a preview window, the preview will be printed in case it is available as a
 pixel image (e.g. JPEG, TIF or GIF). The preview will be printed in the size of
 the paper selected under Page Setup. This may take a while!
 - If your intention is to print the actual asset, instead of its record or preview, see "Print With," p. 196, for details.

Administration

Opens a submenu with several administration options. Descriptions on how to use the administrative functions for catalogs see "Catalog Maintenance," p. 161.



Switch Application Language

Opens a dialog to select a different language for your Cumulus application's user interface. Expand the list to see the languages Cumulus supports.

Languages marked in bold already provide a localized user interface. For all other languages, an English user interface is displayed, but specific writing capabilities for the selected language are supported. This applies to the category tree, input fields and Quicksearch function.

Select the desired language and click **OK**. You must quit the Cumulus application and start it again before the language switch takes effect. If the selected language is not available on your computer, the Cumulus application language will default to English.

Prepare Catalog

Opens a submenu with options for preparing catalogs to manage different standard metadata formats.

For IPTC

IPTC (International Press Telecommunication Council) is a standard for digital text applied to an image. Applications used for professional imaging support IPTC; e.g. the text information in Photoshop is a subset of the IPTC information.

Cumulus can read IPTC metadata information while cataloging. You can view and edit this metadata and Cumulus can write your changes back to the asset. Reading and writing back IPTC data is possible for assets of the following formats: JPEG, TIFF, PSD, and EPS. (For more information on writing back metadata, see "Write back Metadata," p. 191".)

If you want to capture IPTC data from assets and to write back IPTC data to assets, the Asset Handling Set(s) and the catalog(s) managing these assets must be prepared for this feature. IPTC record fields have to be added to the catalog(s) and their properties have to be enabled for field linking. The Writing back Metadata option must be activated in the Asset Handling Sets used to handle the assets containing IPTC data.

The function makes the process of preparation easy. Follow the on-screen instructions.

NOTE: To view the captured metadata, the corresponding record fields must be included in one of your Record View Sets. If none of your Record View Sets provide a view that includes the fields, you have to add these fields to one view of at least one Record View Set. For a description on how to add fields to a view, see "Adding a Field to a Record View," p. 107.

For EXIF

EXIF (Exchangeable Image File Format) is a standard for storing interchangeable information in image files, especially those using JPEG compression. Most digital cameras now use the EXIF format. Cumulus can read EXIF metadata information while cataloging. You can view and edit this metadata. If you want a catalog to store EXIF information on assets, you have to add the EXIF record fields to this catalog. This function does it for you. Follow the onscreen instructions.

NOTE: To view the captured metadata, the corresponding record fields must be included in one of your Record View Sets. If none of your Record View Sets provide a view that includes the fields, you have to add these fields to one view of at least one Record View Set. For a description on how to add fields to a view, see "Adding a Field to a Record View," p. 107.

For XMF

Adobe's XMP (Extensible Metadata Platform) is a labeling technology that allows you to embed metadata into the asset itself. With an XMP-enabled application (e.g. all applications of Adobe Creative Suite), information about a project can be captured during the content creation process and embedded within the file and into a content management system.

Cumulus can read XMP metadata information while cataloging from assets of the following formats: PDF, JPEG, DNG, TIFF and Adobe Photoshop, Illustrator and InDesign files. You can view and edit this metadata and Cumulus can write your changes back to the asset. Writing back XMP data is only possible for assets of the following formats: JPEG, DNG, TIFF, and PSD. (For more information on writing back metadata, see "Write back Metadata," p. 191".)

If you want to capture XMP data from assets and to write back XMP data to assets, the Asset Handling Set(s) and the catalog(s) managing these assets

must be prepared for this feature. XMP record fields have to be added to the catalog(s) and their properties have to be enabled for field linking. The Writing back Metadata option must be activated in the Asset Handling Sets used to handle the assets containing XMP data.

The function makes the process of preparation easy. Follow the on-screen instructions.

NOTE: To view the captured metadata, the corresponding record fields must be included in one of your Record View Sets. If none of your Record View Sets provide a view that includes the fields, you have to add these fields to one view of at least one Record View Set. For a description on how to add fields to a view, see "Adding a Field to a Record View," p. 107.

Rebuild Catalog

Opens a dialog in which you can repair (rebuild) the active catalog.

Backup Catalog

Opens a dialog in which you can save a backup copy of the active catalog.

Compress Catalog

Opens a dialog in which you can compress the active catalog. (Disabled if the catalog is already compressed as much as possible.)

Migrate Catalog

Open a dialog to convert older Cumulus catalogs into a format compatible with the latest Cumulus version.

Exit

Quits Cumulus.

The Edit Menu

Undo

Allows you to *undo* some of the errors you may have made while entering text into fields. It reverts to the former text entry. It works for string fields of the Information window or view, for the Quicksearch entry field and when renaming categories. (Disabled if not available.)

Note that this function is limited to revert text entries, it will not reverse any functions.

Cut

Removes the current item or text selection and places it on the Clipboard so that it can be pasted elsewhere.

Copy

Copies the current item or text selection and places it on the Clipboard so that it can be pasted elsewhere.

Paste

Places the contents of the Clipboard into the current location or text insertion point.

Delete

Deletes the selected records or categories from the catalog after confirmation of the action. (Disabled if no records or categories are selected.)

The confirmation dialog for deleting records offers two options: to delete the record only or to delete the record and its associated asset, too. This is not undoable. Make sure that you no longer need an asset or that you have a copy elsewhere before deleting one.

If you decided to have the asset deleted as well but the asset cannot be deleted (e.g. because it is read-only access), the record will not be deleted either. Note that records that represent assets stored on CDs will be deleted.

NOTE: Deleting Related Assets

If the record to be deleted represents a preferred alternate or a variant source you will get an informing message that also lets you cancel the process.

Select All

Selects all objects or text. The type of selection depends on which window is active and whether you have clicked inside a text area.

Deselect All

Cancels any previous selection.

Preview Tools

Opens a submenu that lets you toggle between Hand tool and Select tool and that offers functions for the comment tool. For more information on these tools, see "Overview: Toolbars for Previews," p. 52. (Disabled if no Preview window or view is activated.)

⊞ Preferences

Opens the Preferences window, from which you can set all preferences. (See "Customize Cumulus," p. 99, for details.)

The View Menu

Palette Mode

Changes the view of the Cumulus application to palette mode and back. In Palette Mode, the thumbnails and the contents of record fields are displayed as defined in selected view set.

In palette mode the Cumulus application will shrink to a palette that can conveniently be used with another application. That way you can easily drag and drop cataloged assets into other applications. All open collections will be changed to palette mode. They are displayed on top of each other. The Palette Mode window can be resized to fit your needs (and all display changes will be kept when

you reopen the palette mode). All Cumulus functions remain available; to display the menus select **Menu**.

Toolbar

Offers a submenu to select the size of the toolbar and options to toggle the toolbar on and off.

Statusbar

Toggles the statusbar on and off.

Workspace

Opens a submenu with options that let you toggle panes of your workspace on and off:



Several menu options enable you to open (and close) additional panes in the current Collection window and to save this combination of panes as a work-space. A workspace saves even more information. It includes:

- window size
- · window location
- · visible panes
- view sets selected for each pane.

Below these menu options you will find more options if any saved layouts are available for you.

The additional panes will be displayed at the bottom of the Category pane.

TIP: Resizing Panes

You can resize the panes by pressing the ALT / Option key and dragging the split bar. (Just clicking the split bar will resize the topmost pane and the sub-pane of the dragged split bar only.)

Collapsing: Pressing the ALT / Option key and double-clicking in a pane's statusbar will collapse the pane so that the statusbar is displayed only and the pane above will fill the area. (Just double-clicking lets the pane above retain its size and the topmost pane will be enlarged.) A double-click on the statusbar of the topmost pane will collapse all panes below.

Expanding: Pressing the \triangle ALT / \bigcirc Option key and double-clicking in a collapsed pane's statusbar will expand the pane again – using space from the above pane. (If you just click it – without the \triangle ALT /

• Option key – the pane will be expanded using space from the top-most pane.) A double-click on the statusbar of the collapsed topmost pane will expand *all* panes below.

Minimizing: Double-clicking a pane's split bar minimizes the pane or resizes it again.

Calendar Pane

Toggles the Calendar pane on and off.

Use the Calendar pane to search for records by date. Dates that correspond records are highlighted. If you move the cursor over a highlighted date, a tooltip shows the number of corresponding records in all catalogs open in the current collection.

Clicking on the 📃 icon opens a menu with the following options:

- Record View Set to change the used Record View Set
- Calendar Mode to toggle between Month mode and Year mode. In month mode, you can select a single day or multiple days of the month or an entire month for searching. In year mode, you can select a single month or multiple months of the year or an entire year for searching.
- Field to select the record field to which the highlighted items in the Calendar pane correspond, e.g. Asset Creation Date, Asset Modification Date, Record Creation Date, etc. You can select from all date fields and date-only fields that are indexed for searching in the currently open catalogs.

Double-clicking any highlighted date or the month/year title starts a record search. Double-clicking a date inside a multiple date selection, finds all records belonging to any of the selected days/months. The search result will replace the current selection in the record main pane.

If you hold the Ctrl key while double-clicking a highlighted item in year view, it switches to the specified month displayed in month view.

The Calendar pane has its own toolbar.

Calendar Pane Toolbar Items

- 1 Switches to current month/year
- 2 Switches to the previous year
- 3 Switches to the previous month (disabled in year mode)
- 4 Switches to next month (disabled in year mode)
- 5 Switches to next year
- 6 Opens a menu with following options:
 - Record View Set.
 - Calendar Mode (month/year)
 - Field
- 7 Minimizes the pane.
- 8 Closes the pane.

Category Pane

Toggles the Category pane on and off. (Menu equivalent to the toolbar icon.)

Category Information Pane

Toggles the Category Information pane on and off. The Category Information pane displays information about the selected category. Which fields are displayed in the Category Information pane depends on the settings in the current Category View Set.



Collection Basket Pane

Toggles the Collection Basket pane on and off. The Collection Basket that enables you to gather and sort records for one-click access and optional processing.

The Collection Basket only slightly differs in function from regular collections. For this reason, most of the functions available while working with standard collections—changing view sets, saving and sharing contents, resorting, etc.—are also available from within the Collection Basket.

The Collection Basket pane appears on the right side of the main collection window and has its own toolbar.

Collection Basket Pane Toolbar Items

- 1 Lets you choose an action as output option (action) for Collection Basket contents
- 2 Replaces the main collection window contents with the contents of the Collection Basket
- 3 Clears the Collection Basket
- 4 Lets you choose a record view set, sort field and sort order for the Collection Basket contents
- 5 Closes the Collection Basket



Changing the Appearance and Size of the Collection Basket

The appearance of the Collection Basket can be changed using many of the same options you know from standard collections:

- Thumbnails and Details Use the toolbar icons for changing the Collection
 Basket between thumbnail and detail views. (Make sure the Collection Basket
 is the active pane before making the change.)
- Record View Sets Use the Record View Set menu found under the 📃 icon located at the top of the Collection Basket pane to choose from the available record view sets.
- Thumbnail Size Use the standard thumbnail resizing icon located on the toolbar to adjust the size of Collection Basket thumbnails. You'll also notice that when you reduce the width of the Basket using the vertical bar, the thumbnails scale down in size to remain visible.

In addition, you can resize the Collection Basket by dragging the bar that divides the main collection and Collection Basket panes. Double-clicking this bar minimizes the pane or resizes it again.

Working with the Collection Basket's Contents

Moving Asset Records Into the Basket

Add asset records to the Collection Basket from the main collection window using drag & drop. Select one or more records and drag them into the Basket. You can add as many records at a time as you need, and you can add additional records at any time thereafter.

Removing Asset Records from the Basket

Select one or more records inside the Collection Basket and press the DEL key on your keyboard to remove them from the Basket. The items are removed from the Basket, but not from the main collection or catalog.

Optionally, you can use the menu command Find > Remove Record from Collection.



Collection Basket output options include asset actions and other features familiar to Cumulus users.

Rearranging the Order of Asset Records in the Basket

As you would in any other collection window, you can drag thumbnails around in the Collection Basket to rearrange them. You can also sort the contents of the Basket using the Sort By menu found under the collection Basket pane. (Use the Sort Direction menu to reverse the sort.)

Outputting the Collection Basket's Contents

The icon open a list from which you can select an output option for the contents of the Collection Basket. Ilists the asset actions available, and also includes several standard Cumulus functions, such as emailing, creating Web albums and printing thumbnails.

Choose an asset action and then use the buttons provided to choose whether you intend to output the entire contents of the Collection Basket or just the selected items.

Once you make your selection and click **OK**, the Collection Basket passes the list of assets to the selected action. Then the asset action is processing. At that point, you might see the user interface of the active module and can set parameters for the processing. (Or, if you've chosen an asset action that is configured for no user interaction, you will not see any further windows.)

- For information on asset actions, see "Using Asset Actions," p. 50.
- For information on the Mail To function, see "Mailing Your Assets," p. 51.
- For information on the Web Album function, see "WebAlbum," p. 65.

Replacing the Main Collection with the Collection Basket Contents

If you ever want to replace the contents of the main collection pane with the contents of the Collection Basket, click the icon. The main collection is updated. There is no "undo" for this operation, so make sure you intend to replace the main collection's contents when you click this icon.

Clearing and Closing the Collection Basket

Clear the contents of the Collection Basket using the [7] icon at the top of the Collection Basket. There is no "undo" for this operation, so make sure you intend to clear the basket's contents when you click this icon.

Click to close the Collection Basket window. Closing the Collection Baskets does not clear it's contents – when you reopen the Basket, the contents appear as you left them.

NOTE: If your User Settings have the **Re-open Collections and Catalogs** option activated, the contents of your Collection Basket will reappear the next time you open that same catalog (or set of catalogs), even when using the Web Clients. But if you open a different catalog in the interim, the contents of the Collection Basket are deleted.

Information Pane

Toggles the Information pane on and off. The Information pane displays information about the record(s) selected in the current collection. Which fields are displayed in the Information pane depends on the settings for the Info View of the current Record View Set.

Preview Pane

Toggles the Preview pane on and off. The Preview pane displays the record selected in the active record pane in Preview View. This means that the display depends on the selected Record View Set.

Preview Pane Toolbar Items

- 1 Shows first page of preview (available with multi-page previews*)
- 2 Shows previous page of preview (available with multi-page previews*)
- 3 Shows next page of preview (available with multi-page previews*)
- 4 Shows last page of preview (available with multi-page previews*)
- 5 Opens a list for selecting a Record View Set.
- 6 Closes the pane.
- * For more information on multi-page previews, see "Multi-page Previews," p. 53

TIP: The preview images can be resized using the zoom slider in the main toolbar



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Sub-Pane for Relations

Opens a sub-pane below the active record or closes it. The sub-pane displays records or other information that are related to the selected record as defined in the active Sub-Pane Filter.

Thumbnail Pane

Toggles the Thumbnail pane on and off. The Thumbnail pane displays the record selected in the active record pane as thumbnail.

Save Current as Default Workspace

Saves the current layout as your default workspace for collection windows.

Use Default Workspace

Applies the saved default workspace as layout for the current collection window.

Save Current Workspace As

Opens a dialog that allows saving the current workspace under a selectable name. Enter a name for the workspace .

A saved layout includes:

- window size
- window location
- · visible panes
- view sets selected for each pane.

Manage Workspace

Opens a dialog displaying all available workspaces (in alphabetic order). You can select one and apply it to the current collection window by clicking **Open**. You can also delete workspace layouts via this dialog. Select the entry and click **Delete**. Note that shared Workspaces can be deleted by the Cumulus Administrator only.

Thumbnails

Activates Thumbnail View: Displays records as thumbnails and the contents of record fields as defined in the selected view set. (Menu equivalent to the toolbar icon.) Once this view mode is active, you can use the zoom slider to change the size of the thumbnails or use predefined sizes via menu (View > Thumbnail Sizes).

Details

Activates Details View: Displays records in a sorted text list as defined and the contents of record fields as defined in the selected view set. (Menu equivalent to the toolbar icon.)

Information

Activates Information View: Displays metadata information stored with the record. The displayed fields are defined by the selected view set. (Menu equivalent to the toolbar icon.)

Preview

Activates Preview View: Displays records as previews. The records' assets must be accessible to display the preview. Once this view mode is active, you can select different sizes for the previews. (Menu equivalent to the toolbar icon.)

TIP:

The preview image can be resized using the zoom slider.

Report

Activates Report View: Displays thumbnail and metadata information in horizontal order (a sort of hybrid between the Details and Info View modes.) It offers a convenient way to display the contents of text fields that contain lots of information. Can display as many lines as needed for quick browsing. (Menu equivalent to the toolbar icon.)

TIP:

The thumbnails can be resized using the zoom slider.

Record View Set

Opens a submenu with the available Record View Sets. For more information on Record View Sets, see "Record View Sets," p. 105. (Disabled unless a record is selected.)

TIP:

You can easily access the preferences of Record View Sets by selecting the Customize entry in the list for selecting Record View Sets. This entry opens the preferences for the current Record View Set.

Category View Set

Opens a submenu with the available Category View Sets. For more information on Category View Sets, see "Category View Sets," p. 110. (Disabled unless a category is selected.)

TIP:

You can easily access the preferences of Category View Sets by selecting the Customize entry in the list for selecting Category View Sets. This entry opens the preferences for the current Category View Set.

Preview/Thumbnail Sizes

Opens a submenu to select the size of thumbnails or previews.

Small

Displays records as small thumbnails/previews (default 64 x 64 pixel). You can change the default size. (See "User Settings," p. 100, for details.)

Medium

Displays records as medium thumbnails (default 128 x 128 pixel). You can change the default size. (See "User Settings," p. 100, for details.)

Large Thumbnail/Preview

Displays records as large thumbnails (default 256 x 256 pixel)/previews. You can change the default size. (See "User Settings," p. 100, for details.)

Sort By

Opens a list of the available fields of the current collection. Select the field you want to determine the sorting of. (Menu equivalent to the statusbar field.)

NOTE: The selected field should be one with the most records containing information – otherwise you will be quite unhappy with the sorting.

TIP: Unsorted

The option **Unsorted** will display the records in the order they were cataloged. You can sort by two fields. In Details view Cumulus lets you select a second field as sorting criteria. Click the column header for the field you want to use as first sorting criteria and then Shift-click the column header you want to use as second sorting criteria. If you switch to other views, the sorting will remain until you change the sorting.



Details view allows sorting by two fields: The first sorting criteria is indicated by a single arrow the second by a double arrow.

Sort Direction

Opens a submenu that provides two options for the direction of the sort order:

- Sort Ascending Sorts the records in an A to Z (0-9) direction.
- Sort Descending Sorts the records in a Z to A (9-0) direction.

(Menu equivalent to the statusbar icon.)

Language for Field Values

Opens a submenu that provides the possibility to switch the language in which multilingual metadata fields are displayed.

The first entry in the menu is **Application Language** which is also the default. If Application Language is selected, multilingual fields are always displayed in the language of the application (see "Switch Application Language," p. 175).

If the language for field values is set to a language that is not defined for a multilingual field, this field displayed in its base language instead.

Changing the language for field values takes immediate effect.

Prerequisites and Additional Hints

The **Language for Field Values** function only works if the currently open catalog contains record fields and/or category fields that are enabled for multi language support.

Additionally, the following prerequisites must be met:

- To allow language switching for metadata fields, the Allow language switch
 for multilingual fields option must be activated in the preferences of the
 current View Set's active view. If this option is not activated, multilingual fields
 are always displayed in the language of the field that was added to the view.
- To allow language switching in the Category pane, the Preferred Language
 option must be activated and set to As defined in View menu in the Category Pane preferences of the current Category View Set. If the Preferred Language option is not activated, multilingual categories are always displayed in
 their base language.

There is one more issue with the category pane.

Instead of coupling the language of the Category pane to the selection made in the View menu. you may as well select a language to always be used with the category pane, independent of the language used for other metadata fields. Activate the **Preferred Language** option in the Category Pane preferences and select the desired language.

Category Pane and the Categories Field: Making the Language Consistent

If your Category pane is set to a language different from the language of other multilingual fields, you may nevertheless want to have the categories displayed always in the same language, both in the Category pane and in any specific View of your View Sets.

For example, you may have a German Category pane, whereas multilingual fields are set to be displayed in English. If category assignments of an asset are displayed in the Info View or the Asset Info Window, you would expect to see German category names here, as in the Category pane. However, according to the language settings for multilingual fields, they are displayed in English.

To solve this inconsistency and always have the same category language used both in the Category pane and in the Categories field displayed in a record view, open the Record View Set preferences, select the desired View Set and View and make sure that the **Preferred Language** settings in the **Properties** of the Categories field are identical to the **Preferred Language** settings of the Category pane.

NOTE: This has to be done individually for every View in every View Set where the Categories field is displayed.

Go To

Opens a submenu for navigation. The available options depend on the current focus.

Preview

Opens a submenu for preview display options. (Disabled if no Preview window or view is activated.)

Zoom In

Doubles the size of a preview image. Preview images can be increased to eight times or 800% of their original size. (Disabled if no Preview window is activated.)

Zoom Out

Halves the size of a preview image. Preview images can be reduced to one eighth or 12.5% of their original size. (Disabled if no Preview window is activated.)

Fit to Window

Resizes the Preview window to fit inside the main Cumulus window. Can be set as default, see "User Settings," p. 100, for details. (Disabled if no Preview window is activated.)

Fit Width to Window

Resizes the Preview window to fit the width of the main Cumulus window. Can be set as default, see "User Settings," p. 100, for details. (Disabled if no Preview window is activated.)

Fit Height to Window

Resizes the Preview window to fit the height of the main Cumulus window. Can be set as default, see "User Settings," p. 100, for details. (Disabled if no Preview window is activated.)

Full Screen

Displays a preview using the whole screen. (Disabled if no Preview window is activated.)

TIP:

To view multiple assets at once, use **Asset > Fullscreen Preview**.

Categories

Opens a submenu.

Expand

Expands the selected categories to reveal subcategories. This works the same way as clicking on the arrow icon to the left of the parent category. (Disabled if no parent categories are selected.)

TIP: To expand all categories under a parent category, press the 🖺 ALT /

Option key when clicking on the category arrow icon.

Expand All

Expands all parent categories to reveal subcategories. (Disabled if all parent categories are already expanded.)

Collapse

Collapses the selected parent categories to hide subcategories. This works the same way as clicking on the arrow down icon to the left of the parent category. (Disabled if no expanded parent categories are selected.)

TIP: To collapse all categories under a parent category, press the \blacksquare ALT /

Option key when clicking on the category arrow icon.

Collapse All

Collapses all parent categories to hide subcategories. (Disabled if all parent categories are already collapsed.)

The Find Menu

Find Records

Opens or activates the Record Find window. (See "Searching with the Find Window," p. 33, for details.)

Find All Records

Resets the current selection of records to the entire contents of the catalog(s) opened in the collection. This is useful after a search operation has reduced the number of visible records.

Find Records by Query

Opens a list for selecting a record query that will be performed immediately. (Disabled unless at least one record query is saved.)

Find Records Assigned to Categories

Finds all records that are associated with the selected categories. This is the menu equivalent to double-clicking on categories. (Disabled unless one or more categories are selected.)

Find Duplicates

Searches the current collection for records with the same record name (the assets and asset names may be different). The search result will replace the current collection.

NOTE: This function may take a while. Hence, we suggest that you put up a collection that fits this search before starting this function.

Find Records with Invalid Field Values

Checks all records of the current collection for any field value that is invalid according to the defined field validators.

This function will find any record with invalid field values, even if the field in question is not displayed in the current Record View Set.

NOTE: You may also check for invalid records on a regular base using the scheduler action **Find Invalid Items**.

Find Offline Assets

Searches the current collection for records with asset references that cannot be resolved. The search result will replace the current collection.

NOTE: This function may take a while. Hence, we suggest that you put up a collection that fits this search before starting this function.

Invert Collection

Searches for all records (of the catalogs opened in the collection) that are not contained in the current collection and replaces the current collection with this search result. With one click you can obtain all records that are not currently shown.

Find Categories

Opens or activates the Category Find window.

Find All Categories

Resets the current selection of categories to the entire contents of the catalog. This is useful after a search operation has reduced the number of visible categories

Find Categories by Query

Opens a list for selecting a category query that will be performed immediately. (Disabled unless at least one category query is saved.)

Show Original Category

Finds and highlights the original category of a selected related category. (See "Category Types," p. 24.)

Show Related Categories

Finds and highlights the selected category's related category or categories. (Disabled unless a category is selected.)

Show Categories Containing

Opens a dialog. In this dialog you can type a string of text that you would like to search for in all category names of the active catalog. Categories whose names contain the text string are highlighted. Related categories are included in the search.

For example: Typing "oa" would find categories called "Boats" and "Oasis."

Remove from Collection

Removes the record/category from the current collection but not from the catalog. (See "Delete," p. 178, for deleting a record/category from a catalog.)

The Metadata Menu

Information

Depending on the active pane this menu item opens the Asset Information window or the Category Information window for the selected record/category.

Category Information window – For further information, see "Category Information Window," p. 26.

Asset Information window (Menu equivalent to the toolbar icon.) – For further information, see "Asset Information," p. 18, and "Editing Asset Information," p. 20.)

Viewing and Editing Multiple Records

If you have selected multiple records before opening the Asset Information window, you can change the field values for multiple records at once. But this is only possible, if in your User Settings for the Display of the Asset Information window the option **Only One Window** is activated and **Display values identical for all selected records** is checked.

If the asset information of multiple records is shown in one window, only field contents which have the same values are displayed. So the **Asset Reference** and **Thumbnail** fields will always be empty. Check boxes (Boolean fields) with different values appear gray. The field **Categories** only displays categories that the selected records have in common. All other field types are displayed with no value if there are different values for fields.

Fields with different values do not show a value but can be edited – this also applies to gray (neutral) check boxes. If you add an additional category, this category is added to the set of categories for each record.

If you add any text to a field that already contains values for one of the selected assets, you are asked whether you want the new text to replace the existing value or to be appended to the existing text.

IPTC Information

Opens the IPTC Information window that provides special access to the IPTC information on the asset(s) stored in the selected record(s). (Disabled when no record is selected.) See "Using the IPTC Information Window," p. 93, for details. For a description on how to prepare a catalog for IPTC, see "For IPTC," p. 176.

Bulk Edit

Opens a dialog to edit metadata of previously selected records.

The Bulk Edit dialog shows the same fields as the Asset Information Window of the current Record View Set – but only if they are user editable.

For each field you can decide how its value is dealt with (default: **Keep Current Value**). Click the icon on the left to have the available options displayed and to choose from them. Note that these options vary slightly according to the type of field selected.

You can either choose an editing option and then enter the desired value, or you can start with entering a value (which automatically turns the editing options to **Replace Current Value**) and select the desired editing option later.

However, with the **Categories** field the first step is always to select the desired editing option and then to use drag & drop or the **Add** and **Remove** buttons to configure a set of categories to be assigned to or removed from the record.

NOTE: Be carefully with the **Replace Current Value** and the **Clear Current Value** options! These options delete all existing category assignments and cannot be undone

Employing MetadataTemplates

You can use the metadata template icon in the lower left corner of the Bulk Edit dialog to prefill the fields with values from a selected metadata template. You may then edit theses values as necessary.

NOTE: Regardless of the actual content of the metadata template, only values for fields that are included in the Bulk Edit dialog are taken into account.

Update Record

Opens a submenu with functions to refresh the selected records with the asset's up-to-date information. This can be necessary if catalog settings have changed, but also if assets have been modified since they were cataloged. Records of unavailable assets cannot be updated. (The menu item is disabled if no records are selected.)

Update Updates the selected records according to the settings specified in the Preferences (User Settings > General > Application > When Updating). Depending on the settings specified for the current catalog (User Settings > Asset Handling), you may be prompted to select an Asset Handling Set.

Advanced

Opens a dialog to specify settings for the current update process. The settings defined in this dialog will not affect the settings defined in the Preferences. Define the settings according to your needs, then click OK to perform the update.

NOTE: If the Asset Handling Set used for the update does not provide the correct settings for creating records for pages/slides (e.g. because the required Asset Storage Module is not activated), the records representing the individual pages will be deleted. Because this might not be the intended result, Cumulus shows a list of the records that are to be deleted. Either confirm the deletion, or cancel the complete update process, or select single records on this list to confirm their deletion only.

Update Formula Fields

Updates all fields containing formulas in the selected records, no matter whether these fields are currently displayed or not. A dialog is displayed which lets you choose whether the Record Modification Date should be changed accordingly or not. (By default, the Record Modification Date is not changed.)

Write back Metadata

Writes metadata from the selected records back to the related assets or metadata container, e.g. XMP files. Opens a dialog to specify an appropriate Asset Handling Set and optionally to select the metadata fields that should be written back. (Disabled if no Asset Handling set is available that has enabled the writing back metadata option.)

When writing back metadata to assets, be aware of the following:

- Metadata can be written back to assets only
 - if the assets are not write protected or stored on a write protected volume
 - if Cumulus has direct access to the assets (no Server/Client Asset Transfer).

Some IPTC and XMP metadata fields overlap. All assets that have been edited
with applications of the Adobe Creative Suite contain both IPTC and XMP
metadata. When writing back metadata to such assets, make sure that both
the Cumulus IPTC and the XMP filter are activated. If not, the IPTC and XMP
data stored in the asset might differ.

NOTE: Captured IPTC and XMP metadata!

As some image files contain IPTC as well XMP metadata in different blocks, and some metadata information is stored in both blocks, the metadata captured by different applications might differ. Some applications give priority to XMP (e.g. Adobe Creative Suite). With a standard installation, Cumulus captures IPTC metadata prior to XMP. If you want to alter the priority to XMP, you have to change the order of the formats for the Asset Handling Set employed for cataloging. In the Asset Formats list of the Asset Handling Set, the entry for the Extensible Metadata Platform format supported by the XMP filter has to have a lower entry number than the first format supported by the IPTC filter. This is due to the fact that Cumulus starts searching for matching formats at the lowest entry number. (See "Asset Format Support," p. 122, for further details.)

Assign Metadata From Template

Open a dialog to select the metadata template to be used for filling. For further information, see "Using a Metadata Template," p. 21.

Find And Replace Metadata

Finds certain information stored on assets in selected records and replaces it with information entered by the user.



- 1. Select one or more records.
- 2. Select Metadata > Find And Replace Metadata. A dialog opens.
- 3. Select the field that stores the information you want replaced. Clicking the arrow button reveals a list of all editable String fields of all open catalogs.
- 4. Enter the text to be replaced in the **Text to find** field.
- 5. Enter the replacement text in the field **Replace with**.
 - **NOTE:** You may enter \n for a line break.
 - FOR SPECIALISTS ONLY: If you activate the Use Regular Expression checkbox, you can enter regular expressions (Perl 5 like) in the Text to find and Replace with fields. For a description on using regular expressions, please refer to the special literature available in book stores and on the Web.
- 6. Click **Start**. Cumulus starts to search for the entered text in the selected field of the selected records. You will get a notice for each of the selected records whether the text was replaced or not. Replacements are not necessary if the text to be replaced wasn't contained in the selected field or if a record is stored in a catalog that does not provide the selected field.
- 7. Click **Close** to finish.

Assign Label

Opens a submenu for selecting the labeling you want to assign to the select record(s). (Disabled if no Labeling field is included in the catalog or if the effects of assigning the label cannot be immediately seen by the user.) For more information, see "Labeling," p. 77.

Assign Rating

Opens a submenu for selecting the rating you want to assign to the select record(s). You can rate assets from 1 to 5. (Disabled, if no Rating field is included in the catalog.) For more information, see "Rating Assets," p. 78.

Assign Categories

Assigns a selection of records to a selection of categories, or vice versa. (This is the opposite of "Detach Categories.')

NOTE: If you have a large number of records (more than 500) you want to assign, it is better that you use this function rather than drag and drop.



- 1. Select one or more records.
- 2. Select one or more categories to which you want to assign the selected records.
- 3. Select **Metadata** > **Assign Categories**. The records are assigned to each of the categories in the selection.

Detach Categories

Detaches a selection of records from a selection of categories, or vice versa. (This is the opposite of "Assign Categories'.)

- 1. Select one or more records.
- 2. Select one or more categories which you want to detach from the selected records.
- 3. Select **Metadata** > **Detach Categories**. The records are detached from each of the categories in the selection.

Optimize Thumbnail

Equalizes the appearance of the selected records' thumbnails. This is useful for thumbnails that are too dark, too light, or lacking contrast. The action cannot be undone, but you can force-update the record to get back the original thumbnail. (Disabled if no records are selected.) (See "Update Record," p. 191, for information on updating a record, including its thumbnail.)

Rotate Preview

Rotates the selected preview's images in one of three ways:

- 90° clockwise
- 90° counter-clockwise
- 180°

(Available only in Preview view or when the Preview window is open.)

Rotate Thumbnail

Rotates the selected records' thumbnail images in one of three ways:

- 90° clockwise
- 90° counter-clockwise

• 180°

(Disabled if no records are selected.)

The record field **Thumbnail Rotation** saves the rotation value for a rotated thumbnail. The rotated thumbnail will be used for previewing, printing, exporting to HTML and creating slide shows.

NOTE: Catalogs Created with Versions Prior to Cumulus 5.5!

If the field **Thumbnail Rotation** (for storing the rotation value) should be available with catalogs that have been created with previous versions, this record field has to be added to the catalog. The field is then empty. There are two ways to fill it out:

- Either, open the Asset Information window and enter the according value (degree of rotation) manually.
- Or, select Metadata > Update Record. This will set the thumbnail back to the asset's orientation. Then rotate the thumbnail again. The value of the rotation will then be stored in the Thumbnail Rotation field.

Assign Variants

Assigns variants to an asset. The asset to which other assets are assigned is called the source of the variant.



- 1. Select the records of the assets you want to assign as variants to a source asset
- 2. Select **Metadata** > **Assign as Variants**. Then a message prompts you to select the source.
- 3. Select the record you want to be assigned as the source of the variants and click **OK**.

To have the variants of an asset displayed, open a subpane and select a corresponding Sub-Pane Filter. For more information on asset relations, see "Managing Related Assets," p. 78.

Assign Alternates

Assigns alternates to assets and lets you define a preferred alternate.



- 1. Select the records of the assets you want to become alternates.
- 2. Select **Metadata** > **Assign Alternates**. Then a message prompts you to select the preferred alternate.
- 3. From the selected records, select the one you want to be the preferred alternate and click **OK**.

To have the alternates of an asset displayed, open a subpane and select a corresponding Sub-Pane Filter. For more information on asset relations, see "Managing Related Assets," p. 78.

Show Related

Opens a submenu displaying the available sub-pane filters. Once you have chosen a filter, a sup-pane displays the records of related assets according to the selected sub-pane filter.

New Category

Creates a category under the currently selected category, named "Category". This name can be changed immediately to a more fitting one. (Disabled unless a single category is selected.)

New Related Category

Makes a related category for each of the currently selected categories. (Disabled unless one or more categories are selected.) (See "Category Types," p. 24.)

The Asset Menu

Preview

Opens a Preview window for each selected record. The records' assets must be available to display the Preview window. (Menu equivalent to the toolbar icon.) The contents of the window opened depends on the asset type and on the active Record View Set. (For a description on how to configure the view of the Preview window see "Record View Sets," p. 105.)

Image previews can be zoomed in or out and displayed in different sizes and you can add user comments. For more information, see "Preview View and Window," p. 52.

Fullscreen Preview

Shows assets as fullscreen previews. You can display up to six different assets at once. The records' assets must be available to display.

What is displayed depends on the asset type and on the active Record View Set. (For a description on how to configure the view of the Preview window see "Record View Sets," p. 105.)

For more information, see "Fullscreen Preview," p. 54.

Fullscreen Slide Show

Shows assets as fullscreen previews in a slide show. The records' assets must be available to display. (Menu equivalent to the toolbar icon.)

What is displayed depends on the asset type and on the active Record View Set. (For a description on how to configure the view of the Preview window see "Record View Sets," p. 105.)

For more information, see "Fullscreen Slide Show," p. 56.

Image Editor

Opens the selected image asset in a special window that allows you to edit the image. The Image Editor offers image cropping as well as calibration tools that can enhance the color, sharpness and brightness of your images. For details see "Editing Images," p. 90.

Compare Previews

Opens the selected two image assets along with a comparison image in fullscreen view. For details see "Comparing Previews," p. 56. (Disabled if less or more than two records are selected.)

View With

Opens a submenu with options for choosing an application for viewing the selected asset. (Disabled if no records are selected.)

Creating Application

Opens the selected records' assets with the application that created the assets (if it is known and available).

Other

Opens a dialog to choose an application with which to view the selected records' assets

Customize

Lets you customize the options in the View With menu. You can add and delete applications.

Edit With

Opens a submenu with options for choosing an application for opening and editing the selected asset. (Disabled if no records are selected.)

Creating Application

Opens the selected records' assets with the application that created the assets (if it is known and available) and lets you edit the asset.

Other

Opens a dialog to choose an application with which to open and edit the selected records' assets

Customize

Lets you customize the options in the Edit With menu. You can add and delete applications.

Print With

Opens submenu with options for choosing an application. (Disabled if no records are selected.)

Creating Application

Prints the selected records' assets with the application that created the assets (if it's known and available.)

Other

Opens a dialog to choose an application with which to print the selected records' assets.

Customize

Lets you customize the options in the Print With menu. You can add and delete applications.

Perform Asset Action

Opens a submenu that lists Cumulus Assets Actions. Selecting an Action from that submenu will perform it. For further information, see "Using Asset Actions," p. 50.

TIP:

You can easily access the preferences of Asset Actions by selecting the **Customize** entry in the submenu for selecting an Action. This entry opens the preferences for the current Action.

Convert To

Opens a dialog for converting the asset associated with the selected record to another file format. The target formats depend on the availability of Cumulus Converter modules. Before you decide on the Converter module, you specify the location for the converted file.

The offered modules depend on the AssetProcessor modules activated for the Asset Handling Set selected for asset access in your user settings. Following Converter modules are available:

- Pixel Image Converter (For more information, see "Converting Image Assets," p. 58)
- Watermark AssetProcessor (For more information, see "Watermarking Assets," p. 62)
- ZIP AssetProcessor (For more information, See "Creating ZIP Archives," p. 64.)

NOTE: If you have selected multiple assets' records, the chosen settings will be applied to convert all selected assets.

Mail To

Use this option to attach an asset to an outgoing e-mail message. Cumulus | launches your e-mail application (in case you have more than one, offers you a menu to select) / | | launches your default e-mail application.

Copy To

Copies the selected records' assets to the location specified in the dialog that appears. The original assets are left alone. (Disabled if no records are selected.)

Copy Assets Assigned to Category To

Opens a dialog in which you can choose a destination. Cumulus then copies the assets of records that are associated with the selected categories to the location you selected. The assets are saved in folders named for the categories selected. This option is handy for collecting production files for output (assuming the files all have at least one common category, such as project name). (Disabled if no category is selected.)

Duplicate Asset and Record

Duplicates the asset of the selected record and the record itself. A dialog appears in which you can choose a name and set several options for the new asset and record

Activate **Copy Record Metadata** to copy the metadata from the original to the duplicated record, except creation date and modification date.

Activate **Update Record** to update the metadata in the duplicated record from the duplicated asset.

Activate **Assign as Variant** to assign the duplicated asset as a variant to the original asset.

Activate **Assign as Alternate** to assign the duplicated asset as an alternate to the original asset.

Create WebAlbum

Opens a dialog in which you can create a Web Album. For further information, see "WebAlbum," p. 65.

Show Location

Locates the selected records' assets and displays them in the Mac OS X Finder or Windows Explorer. (Disabled if no records are selected.)

TIP: Show Location of Folder Category

The context menu for categories offers a similar function for folder categories. The selected category's folder is displayed, e.g., in the Mac OS X Finder or Windows Explorer. (Disabled if no folder category is selected.)

Move To

Copies the selected records' assets to the location specified in the dialog that appears and updates the records' asset references to point to the new location. The original assets are deleted. (Disabled if no records are selected.)

Rename

Opens a submenu.

Single

Opens a dialog to rename the asset represented by the selected record. If asset name and record name are the same, the record name will be changed according to the asset name.

Batch

Opens a dialog to rename one or multiple assets represented by the selected records. If asset name and record name are the same, the record name will be changed according to the asset name.

The list on the left offers different name components for the new asset name(s). The list on the right displays the name components used for the renaming. Select the component you want to use in the left list and click the arrow button. The selected components are displayed in the right list. Each selected component has to be defined before you can start the renaming. To define a component, select it in the right list and click **Properties**. For each component, a different window is opened to define its properties.

The result of your definitions is displayed under **Preview**. Once your definitions are as you like them, you have to decide what you want Cumulus to do if the

name or one of the names created according to your definitions already exists in the folder where the asset to be renamed resides. Cumulus can either skip the renaming of this asset or add an auto number to the name of the renamed assets

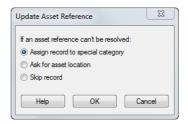
If any assets can not be renamed (due to e.g. no writing rights or not writable storage media), a new category is created named **Rename – Skipped Assets** and inside a subcategory indicating date and time of the process to which the assets are assigned.

The definitions you made for renaming can be saved as a set. Using the icons, you can save the definitions as a set or open a saved set for renaming of the selected records. You can also open an existing set, modify it and then save it under a new name by using the Save As icon.

Update Asset Reference(s)

Updates the path used to find the selected asset files, e.g when assets have been moved. Asset references can only be updated if the assets are available. (Disabled if no records are selected.)

Opens a dialog to specify how to proceed if asset references cannot be resolved:



- Assign record to special category Records with unresolvable asset references are assigned to a special category named Update reference -Skipped Assets and can be processed later. All other records are properly updated.
- Ask for asset location The update process stops on every unresolvable asset reference and asks for the appropriate location
- **Skip record** Records with unresolvable asset references are ignored. All other records are properly updated.

Change Asset Reference

Opens a submenu.

This function allows you to update selected records to reflect a new location of their assets. This is useful if you have cataloged assets from a remote drive or volume that has since been renamed or have simply moved cataloged assets to a new location (and did not use Cumulus for moving them). Without this function, the records would still "point" to the old asset paths. This function does not overwrite, move or otherwise affect asset files at all. You can either change the asset reference for a single asset by selecting an asset or you change the asset references for multiple assets through a batch process.

Select Single

Opens a dialog to browse for the asset that should be represented by the selected record.

Batch



- 1. Select the records that still point to the old location of the assets.
- 2. Select Asset > Change Asset Reference.
- 3. Select Batch.

A dialog appears asking you for the new location. The new location is defined in relation to the old location stored as asset reference.

Server/Volume (under Windows only)

In case the assets now reside on another location in the Network, you have to activate the **Network** Option and then:

a) if the assets now reside on another server (but a volume with the same name), activate the **New Server** option and enter the name of this new server into the field on the left.

b) if the assets now reside on another volume (but still on the same server), activate the **New Volume** option and enter the name of this new volume into the field on the left.

c) if the assets now reside on another server and another volume, activate both the **New Server** and the **New Volume** option and enter the names into the corresponding fields on the left.

In case the assets now reside on another local location, you have to activate the **Local** Option and then if the assets now reside on another drive, activate the **New Drive** option and select this new drive.

Volume (under Mac OS X only)

In case the assets now reside on another volume, activate the **New Volume** option and select this new volume.

Folder Settings

- Activate the **Keep Existent** option if the assets now reside in the same directory structure as they did before.
- Activate the **None** option if the assets now reside directly in the volume/drive selected above (and not in any subdirectories).
- Activate the **Add Parent** option if the assets now reside in the same directory structure as they did before but this structure is now nested into another. The **Add Parent** option lets you enter the path of the directory that now nests the "old" directory structure.
- Activate the **New** option if the assets now reside in just one new directory (and not in any subdirectories). The **New** option lets you browse for the new directory by clicking the ____ button.
- 4. After you select the options you want, click Start.

The application searches for the assets represented by the selected records in the new location and updates the records to the new location. If an asset is not found in the new location, a new category is created named **Change Reference** – **Skipped Assets** and inside a subcategory indicating date and time of the process to which the asset is assigned.

Transform JPEG Original

Opens a submenu that allows you to rotate or flip the original asset if the asset is a JPEG file you have direct access to. The transformation will transverse the JPEG lossless

The **Advanced** item opens a dialog to specify further settings.

Along with the transformation of the asset, its record will be updated as well. The thumbnail will be updated and resemble the transformed asset – regardless of

whether the thumbnail was rotated before. The following record fields will be updated with the new values: Horizontal Pixel, Horizontal Resolution, Image Height, Image Width, Thumbnail Height, Thumbnail Rotation, Thumbnail Width, Vertical Pixel, and Vertical Resolution.

The Help Menu

Contents and Index

Opens the table of contents and searchable index window for Cumulus' online help system.

NOTE: The Cumulus help system is based on HTML pages that can be viewed with any standard Web browser. However, if you employ any pop up blockers, the display of the help system may not be possible.

Source

Opens a submenu that offers the options for the source of the Cumulus help system you use. Select the desired:

Online

Cumulus help comes from the Canto website, where the latest updates will always be available. (This requires an Internet connection.)

Local

Cumulus help comes from your hard drive – if you had it installed with your Cumulus application.

Displays a dialog that shows the version of Cumulus you're using. You can get detailed version information by clicking the **More** button. It also provides a button that launches your default Web browser and initiates a connection to the Canto Web site. This requires an Internet connection. (See the Microsoft Windows documentation for information on setting your default Web browser.)

License

Presents a dialog in which you can view and edit your Canto Cumulus Single User license information.



This appendix gives a list of keyboard shortcuts to common menu commands and options.

Keyboard Shortcuts

Windows	Mac OS X
Ctrl+1	Cmd+1
Ctrl+2	Cmd+2
Ctrl+3	Cmd+3
Ctrl+4	Cmd+4
Ctrl+l	Cmd+I
Ctrl+Shift+I	Cmd+Shift+I
Ctrl+Y	Cmd+Y
Ctrl+Shift+Y	Cmd+Shift+Y
Ctrl+F	Cmd+F
Ctrl+R	Cmd+R
Ctrl+E	Cmd+E
Ctrl+Shift+O	Shift+Cmd+O
Ctrl+O	Cmd+O
Ctrl+B	Cmd+B
Ctrl+P	Cmd+P
Ctrl+G	Cmd+G
Ctrl+A	Cmd+A
Ctrl+Shift+A	Shift+Cmd+A
Ctrl+spacebar	
	Cmd+H
	Alt+Cmd+H
Ctrl+Shift+N	Shift+Cmd+N
Ctrl+F4	Cmd+W
Alt+F4	Cmd+Q
Ctrl+Z	Cmd+Z
Ctrl+X	Cmd+X
Ctrl+C	Cmd+C
Ctrl+V	Cmd+V
Ctrl+,	Cmd+,
Ctrl+Del	Cmd+Del
Del	Del
Shift+Del	Cmd+X
Ctrl+Alt+1	Alt+Cmd+1
Ctrl+Alt+2	Alt+Cmd+2
Ctrl+Alt+3	Alt+Cmd+3
Ctrl+Alt+4	Alt+Cmd+4
Ctrl+Alt+5	Alt+Cmd+5
Ctrl+Alt+N	Alt+Cmd+N
Shift+Ctrl+P	Shift+Cmd+P
•	
+	+
-	-
Ctrl+Alt+R	Alt+Cmd+R
Ctrl+Shift+R	Shift+Cmd+R
	CLIC ALL CLIC
Ctrl+Alt+Shift+R	Shift+Alt+ Cmd+R
	Ctrl+1 Ctrl+2 Ctrl+3 Ctrl+4 Ctrl+1 Ctrl+Shift+1 Ctrl+Y Ctrl+F Ctrl+F Ctrl+R Ctrl+B Ctrl+O Ctrl+B Ctrl+B Ctrl+B Ctrl+B Ctrl+B Ctrl+B Ctrl+B Ctrl+B Ctrl+A Ctrl+A Ctrl+Shift+A Ctrl+Shift+N Ctrl+Shift+N Ctrl+F4 Alt+F4 Ctrl+Z Ctrl+X Ctrl+Z Ctrl+X Ctrl+C Ctrl+V Ctrl+O Ctrl+Del Del Shift+Del Ctrl+Alt+3 Ctrl+Alt+4 Ctrl+Alt+N Shift+Ctrl+P

	Windows	Mac OS X
Go to previous record	arrow left	arrow left
Go to next record	arrow right	arrow right
Go to record above	arrow up	arrow up
Go to record below	arrow down	arrow down
Details view:		
Go to previous record	arrow up	arrow up
Go to next record	arrow down	arrow down
Go to first page (unmarked)	Alt+Home	Alt+Home
Go to previous page (unmarked)	Alt+arrow left	Alt+arrow left
Go to next page (unmarked)	Alt+arrow right	Alt+arrow right
Go to last page (unmarked)	Alt+End	Alt+End
Go to first page (marked)	Home	Home
Go to previous page (marked)	PgUp	PgUp
Go to next page (marked)	PgDn	PgDn
Go to last page (marked)	End	End
Assign categories	Ctrl+Shift+5	Shift+Cmd+5
Detach categories	Ctrl+Shift+6	Shift+Cmd+6
When dragging & dropping an OPI file into another application:		
– place <i>high</i> resolution file		Alt+H
– place <i>low</i> resolution file		Alt+L
Toggle: category and record pane	Tab	Tab
Collection Window – Category Pane		
Create new category	Ctrl+J	Cmd+J
Expand all categories	Ctrl+Alt+X	Alt+Cmd+X
Collapse all categories	Ctrl+Alt+C	Alt+Cmd+C
Category search for previous category	Alt+arrow up	Alt+arrow up
Category search for next category	Alt+arrow down	Alt+arrow down
Category search for selected category	Enter	Enter
Enterprise: Remove categories from collection Workgroup: Delete categories	Del	Del
Delete categories	Ctrl+Del	Cmd+Del
With collapsed category: Go to category of next higher level With expanded category: Collapse category	arrow left	arrow left
With collapsed category: Expand category With expanded category: Go to next subcategory	arrow right	arrow right
Go to previous category	arrow up	arrow up
Go to next category	arrow down	arrow down
Go to first category (unmarked)	Ctrl+Home	Cmd+Home
Go to previous category page (unmarked)	Ctrl+PgUp	Cmd+PgUp
Go to next category page (unmarked)	Ctrl+PgDn	Cmd+PgDn
Go to last category (unmarked)	Ctrl+End	Cmd+End
Go to first category (marked)	Home	Home
Go to previous category page (marked)	PgUp	PgUp
Go to next category page (marked)	PgDn	PgDn
Go to last category (marked)	End	End
Collection Window		
Show/hide Category pane	Ctrl+F3	Cmd+F3
Show/hide Information pane	Ctrl+F7	Cmd+F7

	Windows	Mac OS X
Show/hide Category Information pane	Ctrl+F8	Cmd+F8
Show/hide Thumbnail pane	Ctrl+F9	Cmd+F9
Show/hide Preview pane	Ctrl+F10	Cmd+F10
Show/hide Calendar pane	Ctrl+F11	Cmd+F11
Show/hide Collection Basket pane	Ctrl+F12	Cmd+F12
Use Default Workspace	Ctrl+F1	Cmd+F1
Assign categories	Ctrl+Shift+5	Cmd+Shift+5
Detach categories	Ctrl+Shift+6	Cmd+Shift+5
Information Window / View/Pane		
Save changes	Ctrl+S	Cmd+S
Print Information window	Ctrl+P	Cmd+P
Load information on		
– first record in collection	Alt+Home	
– on next record in collection	Alt+arrow right	
– on previous record in collection	Alt+arrow left	
– on last record in collection	Alt+End	
Go to next field	Tab	Tab
Go to previous field	Shift+Tab	Shift+Tab
Preview Window and Preview Fullscree	en	
Load preview of		
– first record in collection	Home	Home
– previous record in collection	PgUp / Alt+arrow left	PgUp / Alt+arrow left
– next record in collection	PgDn / Alt+arrow right	PgDn / Alt+arrow right
– last record in collection	End	End
100% display	Alt+Ctrl+0	Alt+Cmd+0
Fit to main window	Ctrl+0	Cmd+0
Zoom in	Ctrl++	Cmd++
Zoom out	Ctrl+-	Cmd+-
Scroll in preview	arrow keys	arrow keys
Preview Window only		
Print preview	Ctrl+P	Cmd+P
Edit with creating application	Ctrl+E	Cmd+E
Preview Fullscreen only		
Start/stop loop	spacebar	spacebar
Close fullscreen mode	Escape	Escape
Multi-page Previews	1	
Load first page of preview	Alt+Shift+Home	Alt+Shift+ Home
Load previous page of preview	Alt+Shift+arrow left	Alt+Shift+ arrow left
Load next page of preview	Alt+Shift+arrow right	Alt+Shift+ arrow right



This Glossary offers an alphabetical listing of terms and phrases used throughout this manual and Cumulus.

Glossary

Action

Function or combination of certain functions. Cumulus provides different types of actions. See also Asset Action.

Asset

A general term describing any type of digital media (including graphic, page layout, presentation, sound, and video files) that has value to its owner.

Asset Action

Combination of certain functions saved under a chosen name that is performed on assets in Cumulus

Asset Handling Module

When cataloging and accessing assets, Cumulus uses different modules: Asset Storage, Asset Processor, Metadata and Filter modules.

Asset Handling Set

A setting that defines how assets are handled – during the cataloging process and when accessing assets.

Asset Information

The information about an asset as stored in the record associated with the asset.

Asset Information window

A special window that displays the information about a cataloged asset. This information is stored in the asset's record. (See also Record.) Cumulus also provides an Information View and an Information Pane.

Asset Reference

The mechanism by which Cumulus tracks the actual location of an asset managed in a Cumulus catalog.

AXR (Asset Cross References)

Automatic detection of usage and cross-references of assets within Cumulus. Cumulus is able to detect links and placed assets in compound documents such as QuarkXPress, EPS, Adobe InDesign, and Illustrator (version 8, 9) as well as Microsoft Word and PowerPoint documents.

Boolean

A system of logic based on two possible values: true or false. Cumulus uses the Boolean operators "and" and "or" to combine search conditions.

Cache

A temporary storage area where frequently accessed data can be stored for rapid access.

Catalog

A special file (with the extension *.ccf*) that Cumulus creates to manage cataloged assets. See also Asset and Cumulus Catalog File.

Catalog file name

Name of the special file for a catalog (with the extension .ccf). The catalog name defaults to this file name (without the extension). The catalog name can be changed without changing the catalog file name. See also Cumulus Catalog File.

Cataloging

The process by which a user adds one or more assets to a catalog.

Category

Cumulus categories are used to organize records, much like folders are used to organize files in a traditional filing cabinet. But the asset can appear in any number of Cumulus categories at one time. They are similar in purpose to keywords used in other programs. See also Folder category and Related category.

Category Information window

A special window that displays the information about categories.

Category Exchange File

See Cumulus Category Exchange File.

Category pane

Located on the left side of the Collection window. The Category pane displays category names in a hierarchical list. Multiple tabs are provided so that categories can be created and displayed in separate tabs.

Category View Set

A setting that defines the display options for the Category Information window. For each tab different display options can be set.

Central asset location

A central asset location is a single storage location used to store certaindigital assets. Employing a central asset location ensures your assets remain accessible to all, and can more easily be accounted for.

Client

A computer user who accesses a server application (such as the Cumulus Server) across a network.

Collection

Any set of records from any one catalog, including their display properties. A collection can be saved (see Cumulus Collection File) and opened again. A collection – whether saved or unsaved – is always connected to its catalog. In order to open a particular collection you must have access to its catalog.

Collection window

A window featuring two panes (Category pane and Record pane) that function as the central user interface.

Compound search

A search query consisting of two or more search conditions.

Context menu

Also called shortcut menu. A menu that opens when clicking \bigoplus the right mouse button / $\stackrel{\bullet}{\bullet}$ Control key + mouse button. The available options are related to the selected object.

Cumulus

An indispensable digital asset management system for organizing and managing digital assets. See also Asset.

There are different editions of Cumulus designed to meet the needs of anyone who wants to keep track of their digital media.

Cumulus application window

The main Cumulus window containing the menu bar, the toolbar, the statusbar, and – as "child" window(s) – the Collection window(s) with various panes.

Cumulus Action

See Asset Action.

Cumulus Catalog File

A special file(with the extension .ccf) that Cumulus creates to manage cataloged assets (digital media).

Cumulus Category Exchange File

A file (\blacksquare with the extension *.cce*) that Cumulus creates when exporting category information.

Cumulus Collection File

A special file (\bigcirc with the extension *.cfe*) that Cumulus creates to manage saved collections.

Cumulus Record Exchange File

A special file (\mathbb{H} with the extension *.cre*) that Cumulus creates when exporting record information

Details view

Each record appears in the Record pane as a text listing that includes fields you can define (e.g., record name, file format, resolution, etc.). See also Thumbnail view.

Drag and Drop

A way to move user-interface objects by dragging them with the mouse and dropping them into targets.

EJaP

Embedded Java Plugln. Technology that provides unlimited possibilities to add new functionality or to integrate Cumulus into workflows. EJaPs are Java code that runs within the Cumulus application.

EJSP

Embedded Server Plug-In. Technology that provides possibilities to add new functionality, or to integrate Cumulus into workflows. ESPs are similar to EJaPs (Embedded Java PlugIn). Whereas EJaPs are Java code that runs within the Cumulus application, ESPs are Java code that runs at the Cumulus Server.

EXIF

Exchangeable Image File Format. Standard for storing interchangeable information in image files, especially those using JPEG compression. Most digital cameras now use the EXIF format. The format is part of the DCF standard created by JEIDA (Japan Electronics and Information Technology Industries Association) to encourage inter-operability between imaging devices. Cumulus can read EXIF metadata information while cataloging. You can view and edit this metadata. See also Metadata.

Filters

Software utilities that Cumulus uses to capture information about an asset during the cataloging process. For more information on the availability of new file filters, please see the Canto Website (www.canto.com).

Find window

Cumulus tool that enables users to search catalogs for records or categories that match search conditions.

Folder category

Folder categories are automatically created by Cumulus during the cataloging process. These automatically created categories resemble the folder or directory hierarchy in which the assets reside. They are identified by a smaller folder in their icons. They are created by default but this option can be disabled.

FTP

File Transfer Protocol. A standard Internet protocol, which is the simplest way to exchange files between computers on the Internet.

HTTF

HyperText Transfer Protocol. A standard Internet protocol, which is the protocol most often used in the World Wide Web to transfer information between servers and browsers.

Information window

Special windows that display the information about records or catagories. See also Asset Information window, and Category Information window.

IPTC

International Press Telecommunication Council. Standard for digital text applied to an image. Applications used for professional imaging, support IPTC; e.g. the text information in Photoshop is a subset of the IPTC information. Cumulus can read IPTC metadata information while cataloging. You can view and edit this metadata and Cumulus can write your changes back to the asset. See also Metadata

IPTC Information window

A special window that displays the IPTC information about a cataloged asset. This information is stored in the asset's record.

Java Server Page

Java Server Page (JSP) is a technology for controlling the content or appearance of Web pages through the use of servlets, small programs that are specified in the Web page and run on the Web server to modify the Web page before it is sent to the user who requested it.

Media file

Any electronic or digital media file (including graphic, page layout, presentation, sound and video files). See also Asset.

Menubar

Appearing at the top of the Cumulus application window, the menubar houses menus that contain every program command.

Metadata

Metadata is any data that helps to describe the content or characteristics of an asset. It is the information stored with each asset—such as file name, location, etc. Different types of assets have different metadata fields: an image file, for example, would contain information on color and resolution, while an audio file would have a field for the playback duration.

Palette Mode

View mode that is specially designed for using Cumulus with another application, e.g. a desktop publishing application. In palette mode the Cumulus application shrinks to a palette that can conveniently be used with another application. That way you can easily drag and drop cataloged assets into other applications.

Path/Pathname

A description of the location where a file is stored on a computer hard drive, server, or removable medium (such as CD-ROM, Syquest, Zip, Jaz, or MO cartridges).

Preview

A special program mode in which you can examine cataloged assets such as video clips, sound files, and image files.

Query

A combination of search conditions. Queries can be saved to disk and loaded into the Find window

Ouicklist

A list containing default field values to fill in fields. In Cumulus, available with the IPTC Information window.

Record

The actual catalog entry Cumulus creates when an asset is added to a catalog. Records store valuable information about an asset, such as the file name, file location, file type, resolution, etc.

Record Exchange File

See Cumulus Record Exchange file.

Record pane

Located on the right side of the Collection window, the Record pane displays records as thumbnails or plain text. See also Record, Thumbnail view and Details view.

Related category

An alias of an existing category that acts as a virtual cross reference to the original category. You can use related categories to place multiple instances of the same category under various parent categories, without having to copy the entire contents of the category. By default, the names of related categories are displayed in italics with a "(related)" appendix.

Record View Set

A setting that defines how records are displayed in the different view modes Cumulus provides: Thumbnail View, Details View, Info View and Information window.

Resolution

The number of pixels per inch in any graphic file format. Higher-resolution files have a higher number of pixels per inch than lower-resolution files. Working with higher-resolution files usually requires more memory and hard disk space than working with lower-resolution files.

Script

A list of instructions executed by a computer. Scripts are used by Cumulus to perform complex tasks automatically.

Simple search

A search query consisting of one search condition.

Skin

A term for the particular way in which information is arranged and displayed on a computer screen.

Statusbar

A bar providing descriptions on category/record status.

TAG file

The Cumulus Metadata Exchange file format, which Cumulus can create when cataloging assets from a location where you are allowed to save files. The file has the same name as the asset (with the extension .tag). TAG files can hold all information that can be viewed in the Asset Information window – and more. For example, if a particular asset has been cataloged into different catalogs, this information is part of that asset's TAG file.

Thumbnail

A miniature display of a cataloged asset.

Thumbnail view

The record appears with a miniature display of the cataloged asset in the Record pane.

Toolbar

A standard program tool that offers buttons as shortcuts to commonly used commands.

Tooltip

A small floating descriptive window that appears above a toolbar button when the cursor is positioned over it.

URL

Uniform Resource Locator. The address of a file (resource) accessible on the Internet.

XMP

Extensible Metadata Platform. Adobe's XMP[™] is a labeling technology that allows you to embed metadata into the asset itself. With an XMP-enabled application (e.g. all applications of Adobe Creative Suite), information about a project can be captured during the content creation process and embedded within the file and into a content management system. Cumulus can read XMP metadata information while cataloging. You can view and edit this metadata and Cumulus can write your changes back to the asset. See also Metadata.



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