

CHAPTER XX

FORMATTING RULES



Some options shown in this chapter are only available when the Pagination Module is installed.

INTRODUCTION

EasyCatalog's Formatting Rules provide an alternative to traditional pagination methods and offer much more flexibility when updating the document with new data. By using Formatting Rules instead of standard InDesign libraries EasyCatalog is able to dynamically update Rules in the document if the data changes or if the design of the Rule is modified. This includes being able to automatically insert new data into the correct position in the document and delete data that should no longer be present.

Formatting Rules consists of two main configuration parts: Rules and Rule Sets. A Rule defines how an individual piece of data (such as a record or a group of records) should appear and a Rule Set is a collection of Rules. A Rule Set is used to determine which Rules should be considered for placement in the document.

WHAT ARE RULES?

A Rule can be considered to be equivalent to a library item in an EasyCatalog Pagination library, and they define both how and when a Product Style should appear in the document.

Rules have a number of configuration options which specify:

- where in the data structure of the panel the Rule should be used
- whether the rule should be used selectively for only certain records or groups in the panel
- appearance settings, such as whether the Product Style should be inserted as an anchored object.

Rules can either be dragged to the document and paginated with data in a similar manner to EasyCatalog Library items or, when included in a Rule Set, paginated into a text box.

WHAT ARE RULE SETS?

Rule Sets are collections of Rules, and can be considered to be equivalent to an EasyCatalog Pagination library.

Rule Sets can be used to automatically paginate data into the document in a similar manner to flow-based pagination. When placing data in the document, the Rule Set is used to determine which Rules can be used.

Multiple Rule Sets can be configured in the document, each containing different combinations of Rules. This allows the same Rules to be used in different situations: for example, you could have a Rule Set for the main document pagination and another to paginate the index.

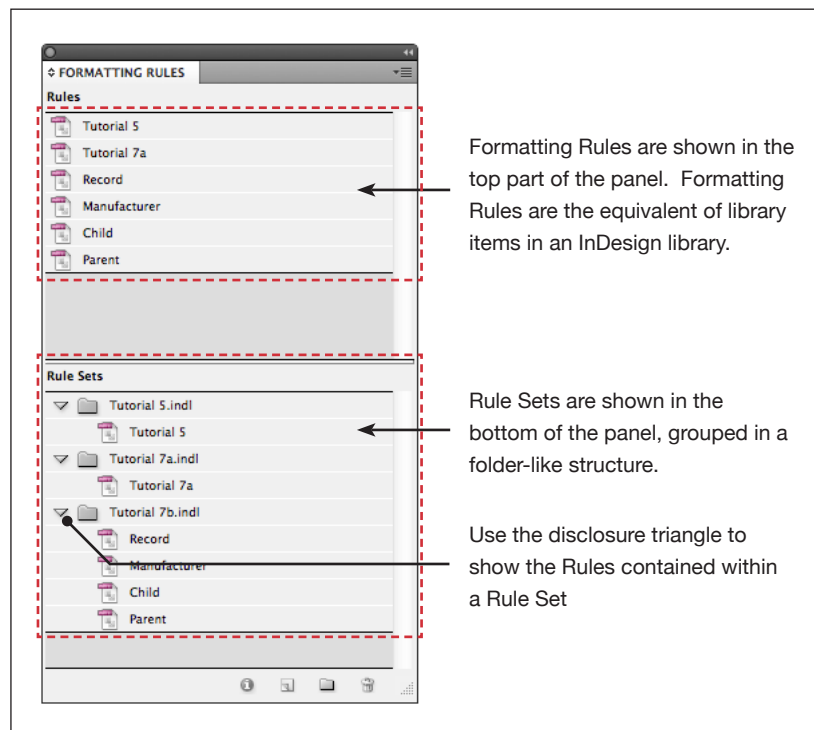
ADVANTAGES OF USING FORMATTING RULES

Formatting Rules provide a number of advantages over using standard pagination:

- There is a link between the Rules placed in the document and the Rules shown in the Formatting Rules panel. This allows the design of a Rule to be updated and the document updated with this change.
- When placing a Rule Set, the configuration of the panel is also stored (such as how the panel is grouped, sorted, etc). This allows EasyCatalog to:
 - automatically insert new records by choosing the appropriate Rule from the Rule Set
 - automatically delete old records as the position of each record and group is tracked
 - update placed Rules, including adding or removing rows from tables in items that are populated with group data.
 - reorder placed Rules if the order of the data changes whilst retaining any formatting that has been applied.
- Formatting Rules and Rule Sets are stored in the document itself, so no external pagination library is required.
- A Pagination library can only contain one set of Product Styles, whereas Formatting Rules allows the user to define multiple Rule Sets, each containing a different combination of Rules.

THE FORMATTING RULES PANEL

Formatting Rules and Rule Sets are controlled from the *'EasyCatalog Formatting Rules'* panel, which can be found on the *'Window'* menu within InDesign.



Formatting Rules are shown in the top part of the panel. Formatting Rules are the equivalent of library items in an InDesign library.

Rule Sets are shown in the bottom of the panel, grouped in a folder-like structure.

Use the disclosure triangle to show the Rules contained within a Rule Set

CREATING RULES

The first step in creating a new Rule is to create your Product Style in the document, using the techniques shown in Chapter 9. If you have already configured an EasyCatalog library, turn off the *'EasyCatalog Library'* menu option on the library panel's pop-out menu and drag each library item to the document.

To create a new rule, you can either:

- Select all the boxes in the document that make up the Product Style and use the *'Create Rule from Selection'* menu option on the *'Formatting Rules'* panel pop-out menu (or press the *'Create Rule From Selection'* button at the bottom of the panel).

or

- Drag the boxes the make up the Product Style to the top part of the Formatting Rules panel.

**CREATING RULES
(CONTINUED)**

The screenshot shows the 'FORMATTING RULES' dialog box. It is divided into two main sections: 'Rules' at the top and 'Rule Sets' at the bottom. The 'Rules' section contains a list of existing rules: Tutorial 5, Tutorial 7a, Record, Manufacturer, Child, and Parent. The 'Rule Sets' section shows a hierarchical tree of folders and files. A blue bar labeled 'Parent Category' is being dragged from the 'Rule Sets' section to the 'Rules' section, as indicated by a curved arrow and the word 'Drag'. At the bottom of the dialog, there are several icons, including one that is pointed to by an arrow from the text below.

New Rules can be created either by dragging the Product Style to the top area of the Formatting Rules panel or by selecting the Product Style in the document and pressing the 'Create Rule From Selection' button.

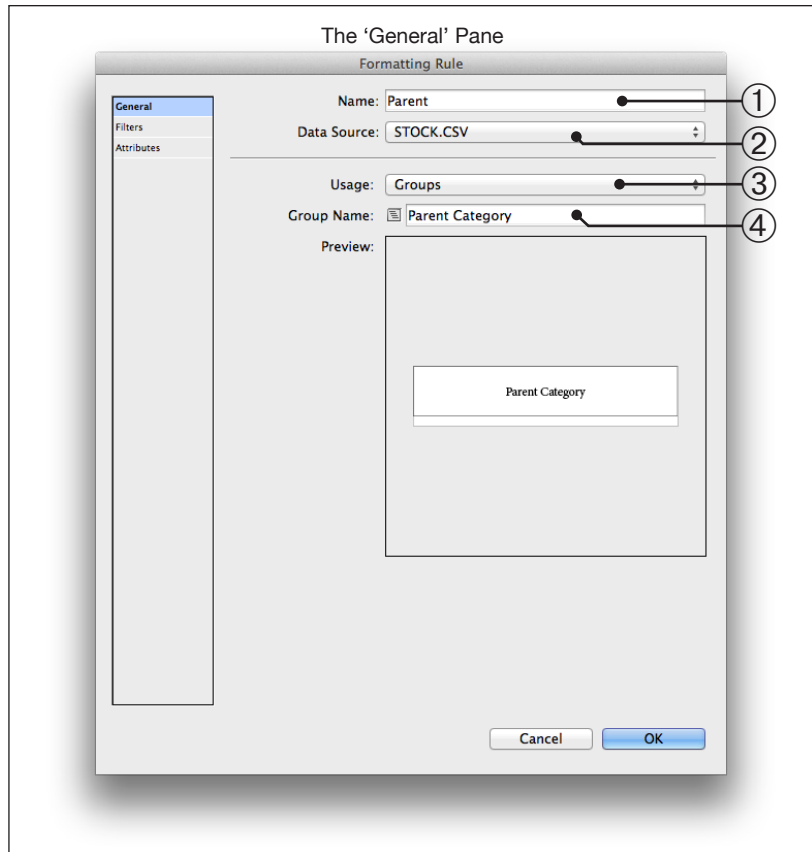
The new rule will be given a default name which can be changed by editing the Rule.

EDITING RULES

Rule properties can be edited by double clicking on the Rule name or by selecting the Rule in the list and using the 'Edit Rule' option on the panel's pop-out menu.

The Rules dialog has three configuration panes:

GENERAL SETTINGS

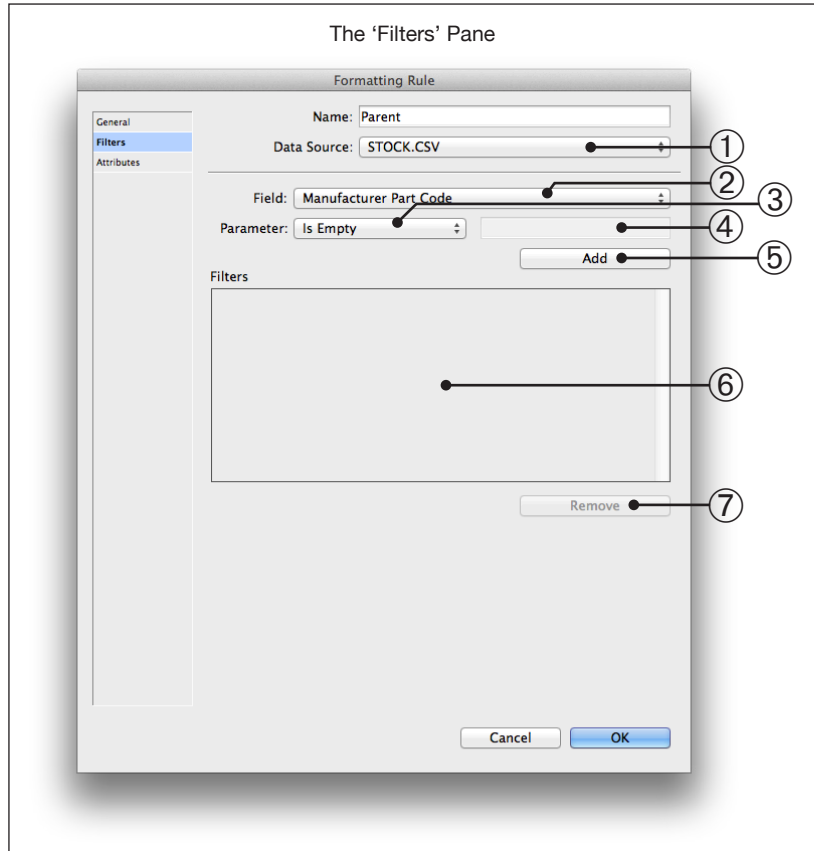


This pane shows a preview of the Product Style, and is used to determine when in the data structure this Rule should be paginated.

Setting	Description
① Name	Specify the name of the Rule. This name must be unique and is used to identify the Rule.
② Data Source	Select the data source that you are intending to use this Rule with. This pop-up is used to ensure that the correct groups are available from the 'Group Name' pop-up. The data source specified here does not affect the placement of data, as rules are not associated with a specific data source.
③ Usage	This attribute specifies whether the Rule will be inserted once for every record in the panel, or it will be inserted for a specific group in the panel.
④ Group Name	When 'Usage' is set to 'Groups', the name of the field that the panel is grouped by should be selected in the 'Group Name' field. To ensure the correct fields are listed, change the 'Data Source' pop-up to the correct data source.

FILTERS The Filters pane is used to specify criteria for when the Rule will appear during Rule Set pagination. Filters test the values of fields in the data source and can be used to ensure that Rules only appear when certain data conditions are met.

By default the Rule will appear for every record or group (as specified on the General pane) unless filters have been specified.



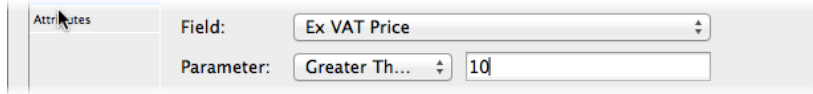
Setting	Description
① Data Source	Select the data source that you are intending to use this Rule with. This pop-up is used to ensure that the correct groups are available from the 'Field' pop-up.

Filters are specified using a series of Field, operator and value criteria:

Setting	Description
② Field	The field to be tested. Fields from the data source selected in the 'Data Source' pop-up will be shown here.
③ Operator	The operator here is used to determine which test will be performed on the field selected in the Field pop-up.
④ Field Value	The selected operator will use this value as part of the test


**FILTERS
(CONTINUED)**

For example, if we only want this rule to appear when the 'Ex VAT Price' is greater than 10 the following criteria would be used:



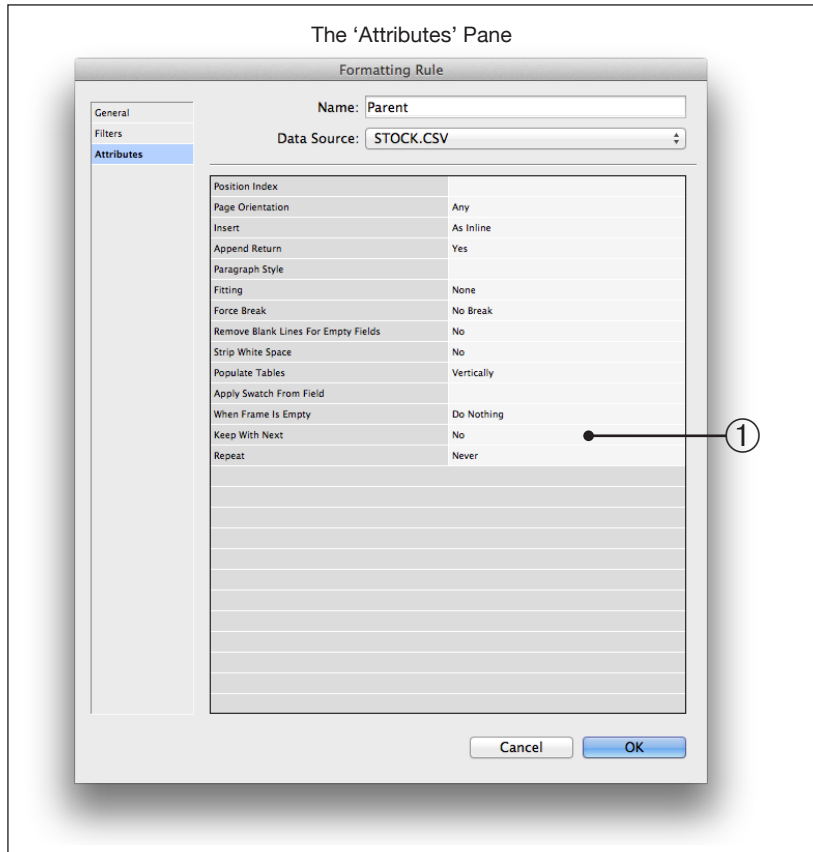
If a Rule Set contains multiple Rules that all pass their specified filter tests, the Rule with the most parameters that matched will be chosen. In the event of a tie, the first matching rule will be used.

ATTRIBUTES



The options shown on this dialog are only available when used with a licensed version of the Pagination Module.

The Attributes pane is used to specify attributes that determine how the Rule should appear when placed during Rule Set pagination, and can also be used to apply post pagination rules such as deleting boxes if they are empty. The attributes shown on this pane are covered in more detail in the '*Pagination Attribute Reference*' chapter.



DELETING RULES

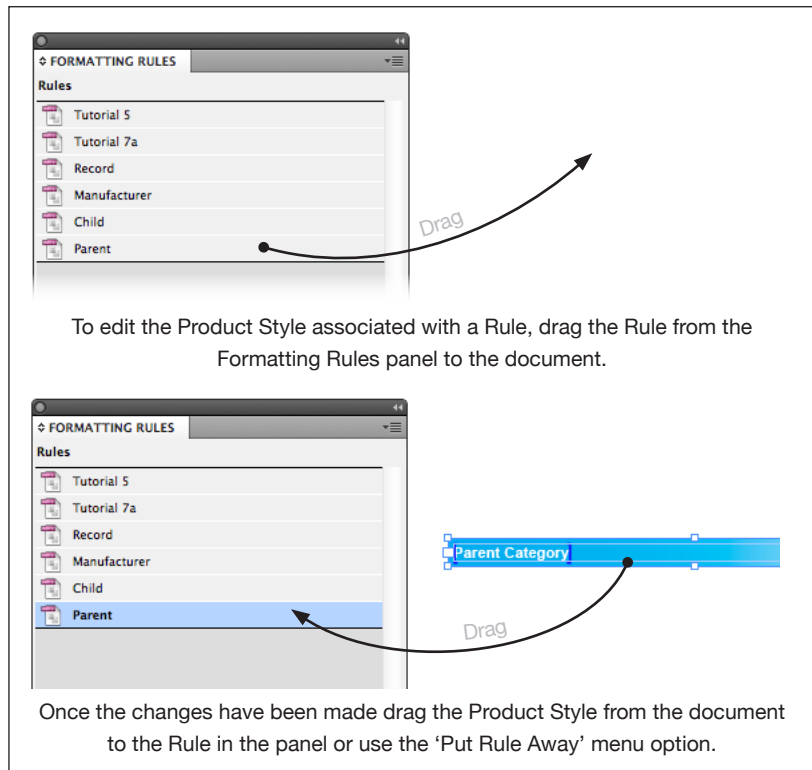
Rules can be deleted by selecting them in the list and using either the trash can button at the bottom of the panel or the 'Delete Rule' menu option. Rules that are deleted will be removed from any Rule Sets that they are placed in, and the Rule will be deleted from the document during the next 'Update Document' operation.

DUPLICATING RULES

Any Rules selected in the list can be duplicated using the 'Duplicate Rule' menu option from the panel's pop-out menu. Duplicated rules will not be associated with a Rule Set.

MODIFYING A RULE'S PRODUCT STYLE

The Product Style for a Rule can be modified by dragging the Rule from the Formatting Rules panel to the document.



POPULATING A RULE WITH DATA


Rules can be populated with data in the same manner as InDesign page objects by dragging and dropping from the EasyCatalog data panel to the document.




Placed Rules also show a status indicator which shows whether the Rule is up-to-date. A Rule is considered to be up-to-date when the data it contains has not been modified and the Rule itself has not been modified since it was placed. A Rule is considered to have been modified if any of its attributes have been changed in the Formatting Rules panel or if the Product Style associated with a Rule has been updated.

**POPULATING A RULE WITH DATA
(CONTINUED)**


Rules that have been dragged to the document can have one of three statuses:



Rules that have not been populated with data are shown with a yellow status



If the Rule has been populated with data, the Rule has not been modified since it was placed and the data has not changed it will have a green status.

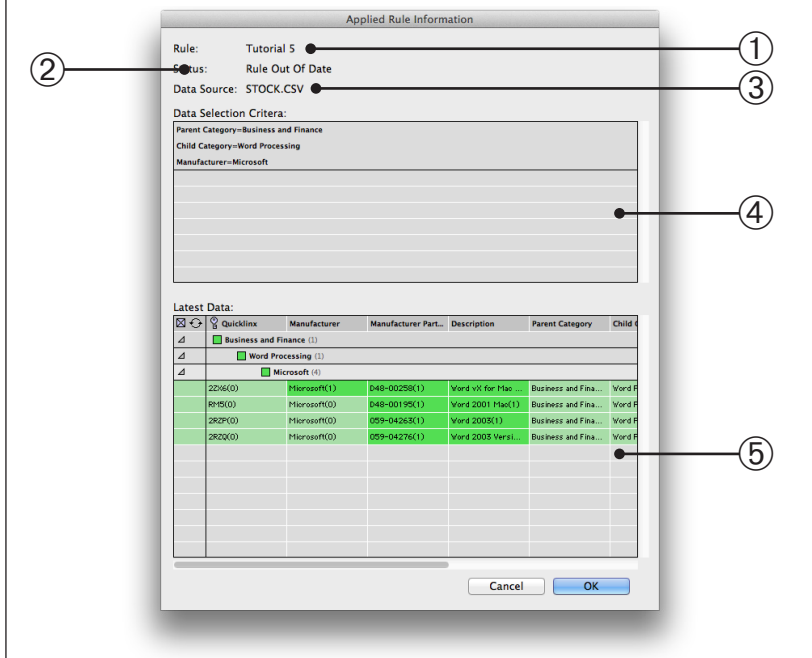


If the Rule has been modified or the data has changed, the rule will be shown with a red status.

The Rule Status indicator will not check the content of each individual field to determine whether it matches the source data: the colour of the individual field markers should be used for this purpose.

If a Rule's status indicator is red, use the 'Inspect Rule Applied To Selection...' menu option from the Formatting Rules' pop-out menu.

Use the 'Applied Rule Information' dialog to show the data that was used to populate the selected Rule. If the Rule's status is shown as red, the reason for this will be shown on this dialog.



Applied Rule Information

Rule: Tutorial 5

Status: Rule Out Of Date

Data Source: STOCK.CSV

Data Selection Criteria:

- Parent Category=Business and Finance
- Child Category=Word Processing
- Manufacturer=Microsoft

Latest Data:

	Manufacturer	Manufacturer Part...	Description	Parent Category	Child
2246(O)	Microsoft(1)	048-00258(1)	Word v4 for Mac	Business and Fina...	Word P...
8195(O)	Microsoft(O)	048-00195(1)	Word 2001 Mac(1)	Business and Fina...	Word P...
2829(O)	Microsoft(O)	059-04265(1)	Word 2003(1)	Business and Fina...	Word P...
2820(O)	Microsoft(O)	059-04276(1)	Word 2003 Verbi...	Business and Fina...	Word P...

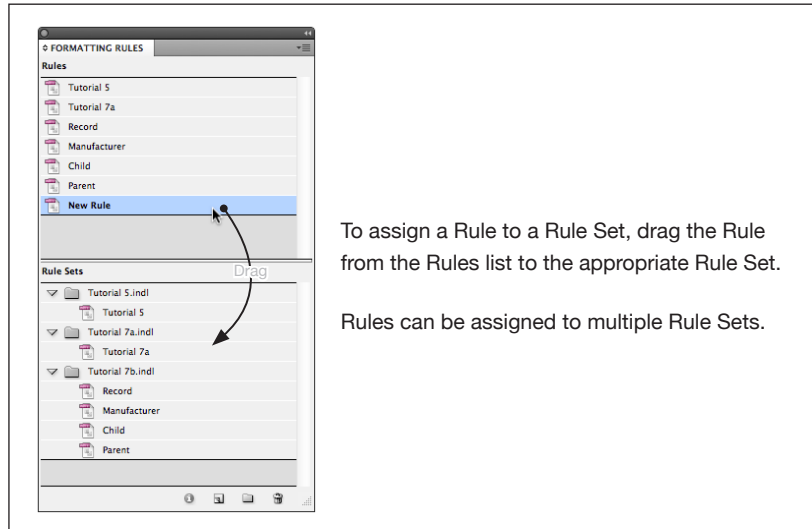
Setting	Description
① Rule	The name of the placed rule
② Status	<p>The current status of the placed rule. The status will be one or more of the following values:</p> <p>Data Source Unavailable The data source is no longer available: it is not open, or has been removed from the workspace folder.</p> <p>Rule Out Of Date The Rule has been modified since it was placed in the document.</p> <p>Data Out Of Date The data has been modified since the Rule was placed in the document.</p> <p>No Data Assigned The Rule has not been populated with data.</p> <p>Rule Does Not Exist The Rule has been deleted.</p>
③ Data Source	The name of the data source from which the data was placed.
④ Data Selection Criteria	The values shown here are used to identify the data that was used to populate the Rule.
⑤ Latest Data	Using the criteria shown in ④, this preview panel shows that data that will be used to populate the Rule during an Update Document operation.

CREATING RULE SETS

New Rule Sets can be created by pressing the *'New Rule Set'* button at the bottom of the panel or by selecting the *'New Rule Set'* menu option on the panel's pop-out menu.

Rule Sets are shown as folders in the bottom part of the Formatting Rules panel. To show the Rules associated with a Rule Set use the disclosure triangle next to the folder icon.

ADDING RULES TO RULE SETS



REMOVING RULES FROM RULE SETS

Select the Rule in the Rule Set that you wish to remove and use the *'Remove Rule from Rule Sets'* menu option. Changes to the contents of Rule Sets will be applied on the next *'Update Document'* operation.

UPDATING THE DOCUMENT

During the *'Update Document'* operation Rules will be re-imported if the data for any of the records used to populate the Rule have changed or if the Rule itself has been modified. When re-importing the Rule any local formatting modifications will be lost.

PAGINATING A RULE SET

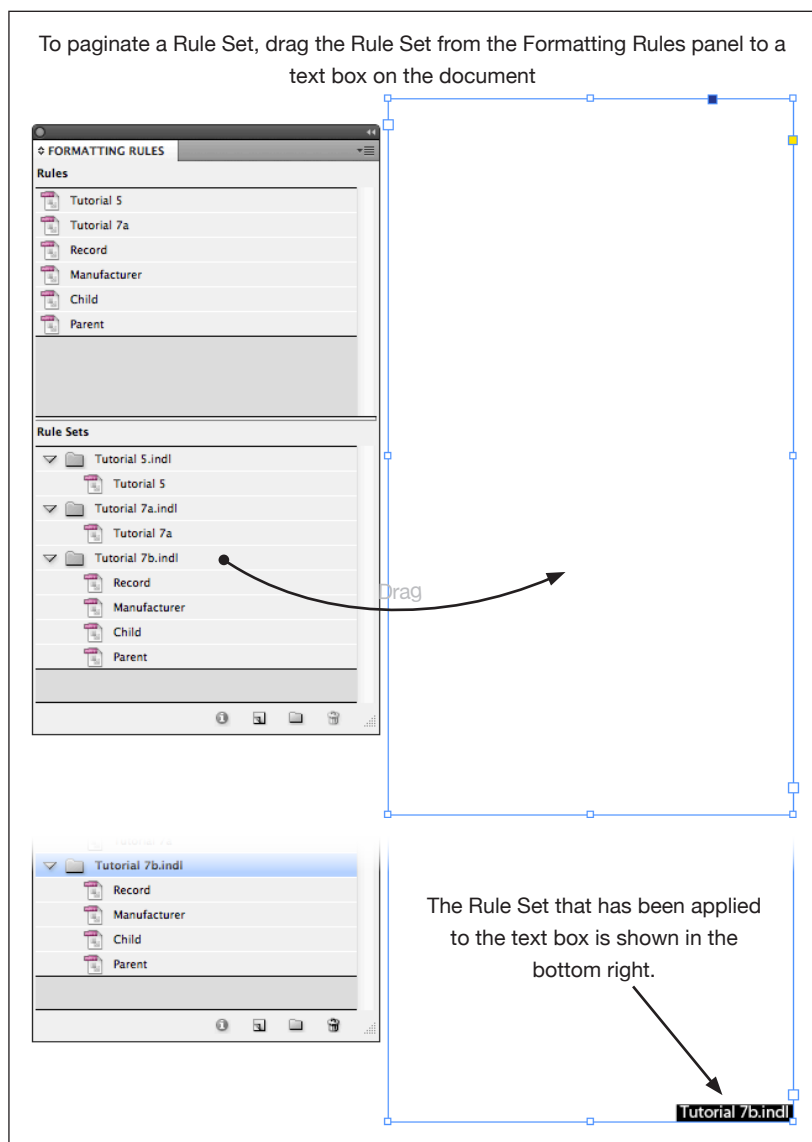


Rule Set pagination is only available when using a licensed version of the Pagination Module.

Once all Rules have been assigned to the Rule Set, the Rule Set can be paginated in the document. Rule Set pagination behaves in a similar manner to flow-based pagination. Rules are paginated into an InDesign text box either as anchored objects or as text (depending on the Rule's *'Insert'* attribute).

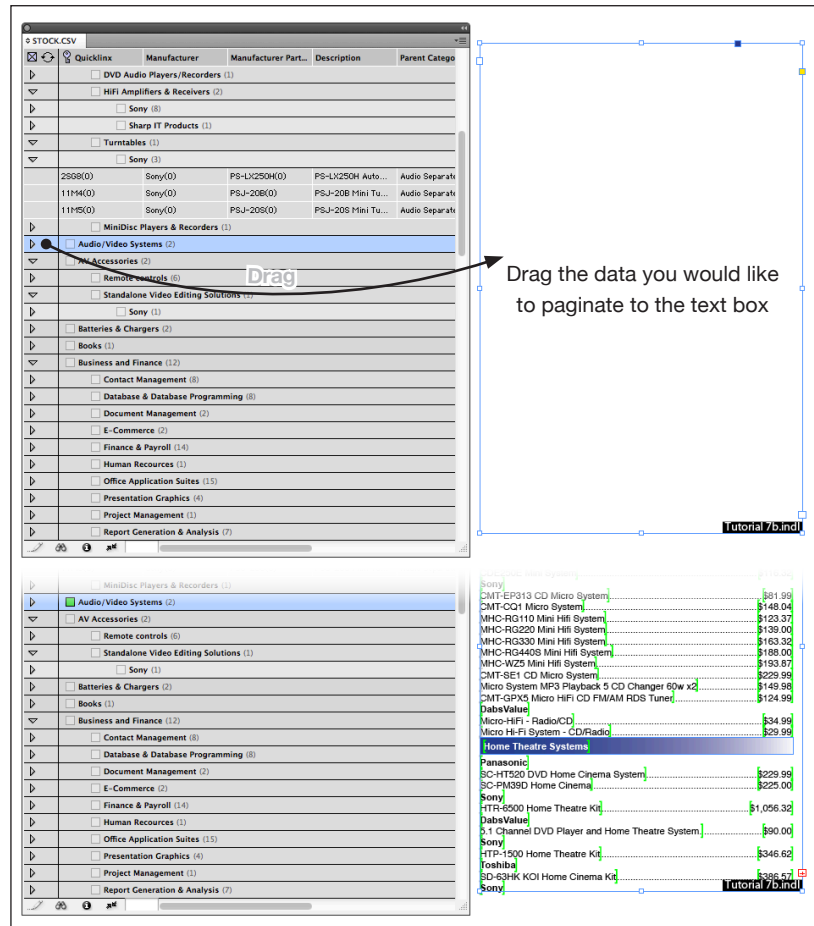
Paginating a Rule Set consists of only two stages:

- ① Assign the Rule Set to a text box to paginate into:



**POPULATING A RULE SET
(CONTINUED)**

② Drag the data to paginate from your EasyCatalog data panel to the text box:



When paginating a Rule Set EasyCatalog stores both the data and it's structure at the time of pagination. Modifications to the structure or order of data in the panel will not affect the order of records in the document. The 'Update Document' operation will ensure that the data remains ordered and structured in the same form as when originally paginated.

UPDATING THE DOCUMENT

Rule Sets are updated as part of the 'Update Document' operation. However, different rules apply to what is updated and when:

- New records will be inserted in the correct position by choosing the appropriate Rule from the applied Rule Set
- Deleted records will be removed from the flow
- Updated records will be reinserted in the flow. Any local formatting made to the Rule will be lost during the update process.
- If a change to the data has resulted in the order of the data changing, the Rule will be moved into the correct position in the

UPDATING THE DOCUMENT (CONTINUED)

flow. Local modifications to formatting and content will be retained provided that the data for the Rule has not changed and the Rule has not been modified.

- If a Rule has been updated, all placed instances of the Rule will be updated. Local modifications to the formatting and content of the Rule will be lost.

IMPORTING RULES

Rules can be imported from an existing EasyCatalog Library or from another document that has Formatting Rules configured.

Importing From a Library

Use the 'Import Library As Rule Set' menu option from the Formatting Rules panel's pop-out menu.

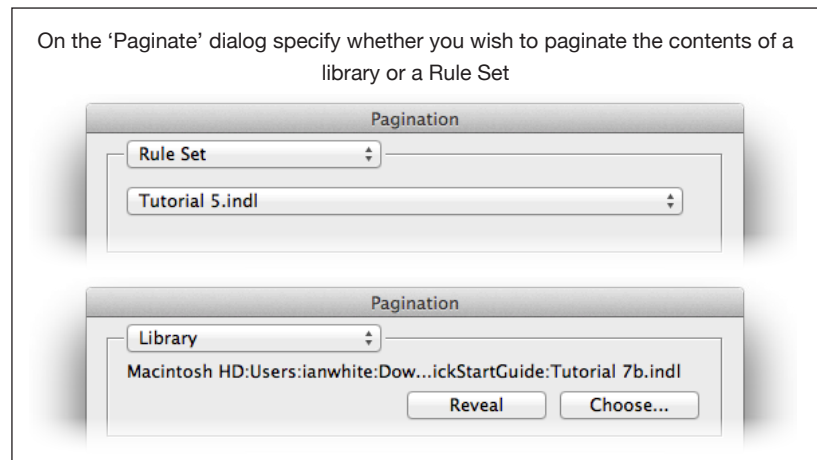
When importing from a library new Rules will be created for each library item and a new Rule Set will be created. The Rules will be created with the same name as the library items; the Rule Set name will be the name of the library.

Importing From a Document

Use the 'Import From Document' menu option from the Formatting Rules panel's pop-out menu.

USING FORMATTING RULES WITH PAGINATION

Rule Sets can also be used with Pagination instead of specifying a Pagination Library.



Flow-based Pagination

Flow-based Pagination will paginate into a text box in the same manner as paginating a Rule Set. The Pagination Module will automatically assign the Rule Set that is selected in the pop-up to the text box being paginated into. As the text box now has an assigned

**USING FORMATTING
RULES WITH
PAGINATION
(CONTINUED)**

Rule Set, updating the document using the '*Update Document*' menu option will follow the rules listed for updating Rule Sets.

Guide-based Pagination and Position-based Pagination

The Rule Set specified in the pop-up on the '*Paginate*' dialog is used to determine which Rules to consider during pagination. As these types of pagination do not paginate into a text flow, the rules concerning the '*Update Document*' operation are slightly different:

- As pagination has not inserted into a text flow, the Rules will not reflow automatically when a new item is inserted for example.
- New Rules will not be inserted into the document automatically.
- Rules for deleted records will not be removed from the document automatically
- If a Rule has been modified in the Formatting Rules panel (or by changing the Product Style assigned to a Rule) it will be replaced in the document during the '*Update Document*' operation.
- If data for a Rule changes the Rule will be replaced in the document. If the Rule has been set to paginate at a group level, for example, and the Rule contains a table it will be updated if new records have been added to the group.