

Lasernet Essentials Form Editor Guide.

Lasernet Essentials

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Contents.

1 Form Editor Guide	3
1.1 Scope	3
2 Find Your Way Around the Lasernet Form Editor	4
2.1 Areas	4
2.2 The View Menu	7
3 Keyboard Shortcuts	11
4 Set Up a Form	13
4.1 Set Up Data Formats	13
4.2 Modify Form Editor Display Settings	14
4.3 Set Text Direction	15
5 Add a Sheet to a Form	18
5.1 Add a Sheet	18
5.2 Pages	19
5.3 Sheet Options	20
6 Specify the Data That Each Form Is Used For	28
6.1 Use Criteria	30
7 Design a Form	34
7.1 Select and Move Form Objects	34
7.2 Add Static Text to a Sheet	
7.3 Add Input Data to a Sheet	
7.4 Add Dynamic Elements to a Sheet	
7.5 Add Data Calculations to a Sheet	
7.6 Add Images to a Sheet	
7.7 Add Shapes to a Sheet	
7.8 Add Tables to a Sheet	
7.9 Add Charts to a Sheet	
7.10 Add Barcodes to a Sheet	
7.11 Add Criteria to Form Objects	
7.12 Position Form Objects in Specific Areas of a Shee	
7.13 Merge Rearranges7.14 Edit Rearrange Properties	
7.14 Edit Realrange Properties	
7.16 Turn Form Objects into Hyperlinks	
7.17 Criteria-based Text Formatting	
8 Preview the Output of a Sheet	
9 Find Data and Form Objects	
9 Find Data and Form Objects	111



1 Form Editor Guide

Lasernet Form Editor provides an easy-to-use environment for designing and maintaining great-looking forms and reports. Enrich your data by rearranging text with various font types, add images, shapes, charts, barcodes and much more. The result is a professional layout that fully complies with your design standard and is ready to be distributed throughout your business channels in a variety of different formats.

1.1 Scope

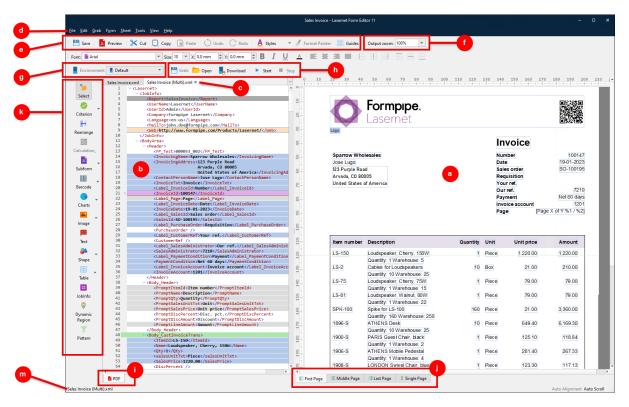
This guide describes how to accomplish key tasks in Lasernet Form Editor for designers who work with forms.



2 Find Your Way Around the Lasernet Form Editor

2.1 Areas

The Lasernet Form Editor window has several distinct areas.



Letter	Area
а	Sheet design area
b	Data area
С	Grab file tabs
d	Menu bar
е	Main toolbar
f	Zoom control for sheet design area
g	Environment toolbar (not supported)
h	Grab toolbar (not supported)
i	Sheet tabs
j	Sheet design area tabs
k	Developer toolbar
m	Status bar



Each of these areas is described below.

2.1.1 Sheet Design Area

In general, this area enables you to specify the structure and content of the output that the *selected sheet* will generate. And depending on the output format of the selected sheet, you can specify how parts of that sheet's output will look.

What you can see (and do) in this area depends on the output format of the selected sheet:

 Visual formats (such as EMF, PDF, and TIFF): You can select, move, and manipulate items on the page (such as text, data, images, and charts).

2.1.2 Data Area

This area displays data from the selected grab data tab. The grab data is representative of the data that Lasernet will encounter when it processes your form. As a result, grab data help you design the form, because you can consider them as test data.

In general, you use this area to specify how the form's input data is used in the form's output. For example, you can add a rearrange that is linked to particular input data, to specify that the data will appear in the output document. Then, you could use the form design area to move the data to an appropriate position on the page.

The data area displays highlighting that indicates which input data the form's design uses, and for what purpose it uses the data. For example, colored highlights indicate that particular data is used by rearranges; a different color indicates data used by patterns. Several other colors indicate other important aspects of how input data is used.

2.1.3 Menu Bar

You can access Form Editor functions and options through the various menus in the menu bar.

2.1.4 Main Toolbar

The main toolbar provides easy access to useful tools such as **Save**, **Cut**, **Copy**, **Paste**, **Undo/Redo**, and **Preview**. You can drag this toolbar (and all other toolbars) to different locations in the Form Editor window.

2.1.5 Zoom Control for Sheet Design Area

This control determines the zoom level of the sheet design area. Zoom in for greater detail or zoom out to see an overview of the page. This is a toolbar, so you can drag it to another location in the Form Editor.

2.1.6 Sheet Tabs

Each sheet in a form specifies the design of a particular document that the form can generate. Click a sheet's tab to design that sheet's output.



A form can consist of one or more sheets, and each sheet has an output format (such as PDF), which can differ from the output format of other sheets in the form. Or, all a form's sheets can have the same output format.

Tip: You can use multiple sheets to create variants of the same document, or to create different documents that are based on the same data.

For example, suppose that a bank operates three distinct banking brands, and that the form's input data (which consists of a particular person's transactions for the previous month, for inclusion in their monthly statement) additionally specifies which brand that person is a customer of. The form could consist of three sheets that generate statements, but whose design differs only in the colors and brand logo used.

Then, each sheet's "sheet conditions" could specify that the form will generate output for that sheet only if the "brand" name included in the input data matches the name of the brand that the sheet generates statements for.

2.1.7 Sheet Design Area Tabs

You use these tabs to design the output for the currently selected sheet. The tabs that are present here depend on the output format of the selected sheet.

You use the **Single Page** tab to design the output for scenarios in which the input data will fit on a single page, and you use the **First Page**, **Middle Page**, and **Last Page** tabs to design the output in scenarios where the amount of input data will result in a multipage document.

2.1.8 Toolbar Design Tasks

This toolbar provides easy access to tools that enable you to do important form design tasks in Form Editor.

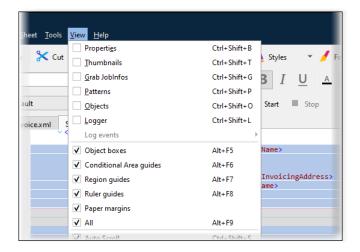
2.1.9 Status Bar

The status bar is in the bottom left-hand corner of the window and provides information about rows and columns in the input sheet and the X and Y coordinates in the sheet design.



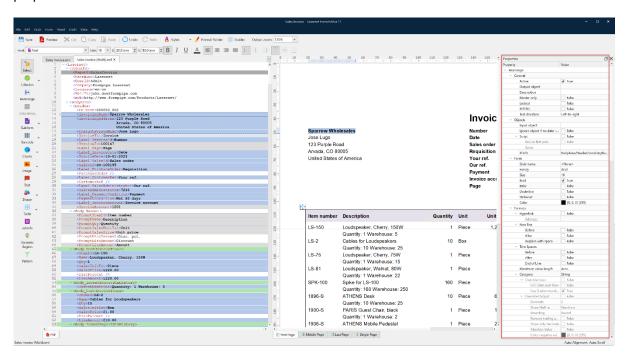
2.2 The View Menu

The **View** menu provides access to features that can assist you in the form design process.



2.2.1 Properties (Show Property Editor)

Click **Properties** to open a third pane that you can use to edit the properties of the selected form item.

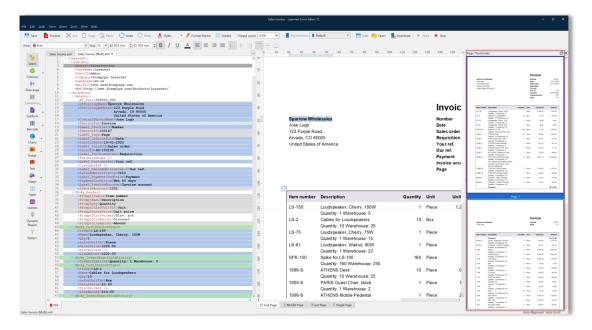


2.2.2 Thumbnails (Show Thumbnails)

Click **Thumbnails** to open a third pane that displays thumbnails of the selected sheet's pages. You can scroll through the thumbnails and click the page whose design you want to edit.



If the sheet is combined or mixed all pages of the combined or mixed document are shown in the pane.

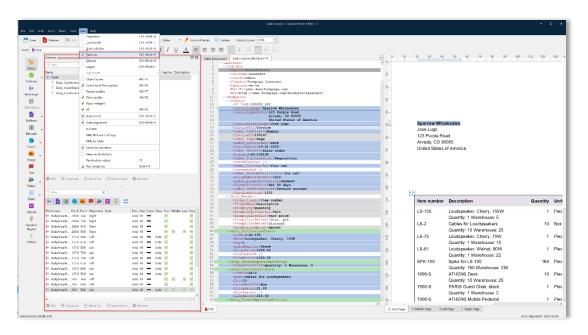


2.2.3 Grab Jobinfos (Show Grab Jobinfos)

Click **Grab JobInfos** to open a third pane that displays the available grab JobInfos.

2.2.4 Patterns (Show Patterns)

Click **Patterns** to open the **Patterns** pane, where you can view and manage the form's patterns. You can also view and manage the objects that belong to each pattern, in addition to managing any objects that do not belong to a pattern.

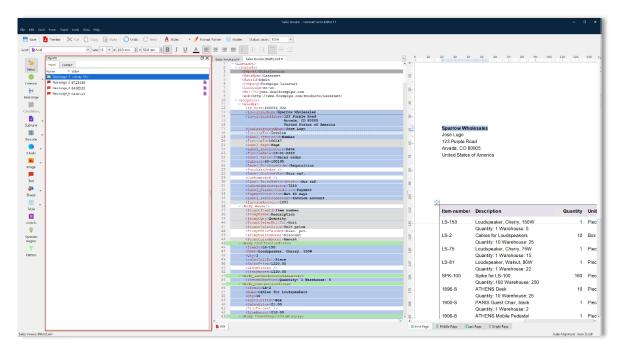




If you select a pattern on the **Patterns** pane, all the objects belonging to that pattern are highlighted in yellow.

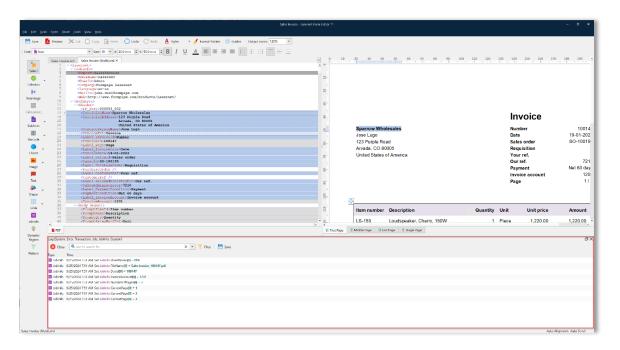
2.2.5 Objects (Show Objects)

Click **Objects** to open a third pane that lists all named objects.



2.2.6 Logger (Show Logger)

Click **Logger** to open the **Log** pane. The **Log** pane provides low-level information and error messages generated whilst you are working with a project.





2.2.6.1 Show Log Events

If **Logger** is selected in the **View** menu, you can access the **Log Events** menu. Use this menu to choose which type of log event the **Log** pane displays. The list includes options such as **System**, **Error**, **Job**, and **JobInfo**, in addition to other log event types.

2.2.7 Object Boxes, Guides, and Margins

The following menu items display visual elements in the page design area to assist you in the design process.

- Object boxes
- Conditional Area guides
- · Region guides
- Ruler guides
- Paper margins

To toggle all these options on or off, click All.

The fewer options you select, the closer your page designs will look to the generated documents.

Note: These options do not affect the generated output documents.



3 Keyboard Shortcuts

You can use keyboard shortcuts to perform different operations in Lasernet. The keyboard shortcuts are listed in the table.

Action	Shortcut
Close grab data tab	CTRL + F4
Switch to right grab	CTRL + Tab
Switch to left grab	CTRL + SHIFT +Tab
Bold set/unset	CTRL + B
Italic Set/unset	CTRL + I
Underline set/unset	CTRL + U
Align Left	CTRL + L
Align Right	CTRL + R
Align Center	CTRL + E
Align Justify	CTRL + J
Сору	CTRL + C
Cut	CTRL + X
Paste	CTRL + V
Undo	CTRL + Z
Redo	CTRL + Y
Sheet Save	CTRL + S
Create New Sheet	CTRL + N
Print Sheet	CTRL + P
Switch to Select Tool	CTRL + ALT + S
Insert Rearrange	CTRL + ALT + R
Insert Text	CTRL + ALT + T
Insert Keyword (JobInfo)	CTRL + ALT + J
Insert Barcode	CTRL + ALT + B
Insert Image	CTRL + ALT + I
Define Cond Area	CTRL + ALT + A
Insert Shape	CTRL + ALT + H
Pattern Select	CTRL + ALT + P
Select multiple objects	Click an object. Press the SHIFT or CTRL key. Click other objects while you continue to press the SHIFT or CTRL key. The order you use to select objects does not matter if you hold the CTRL key. If you use the SHIFT key, first click the first object and then the last one, as a result all the objects



	available between these two objects are selected.
Switch between entities available on the same position or added to the same node	ALT + click an object
Find	CTRL + F
Find Next	F3
Find Previous	SHIFT + F3
Preview	CTRL + F2
Styles	CTRL + D
Show First Page	Home
Show Single Page	End
Show Previous Page in the order: Single - Last - Middle - Middle - First	PageUp
Show Next Page in the order: First - Middle - Middle - Last - Single Page	PageDown
Show First Page (Multiple pages), Single page (One page)	CTRL + Home
Show Last Page (Multiple pages), Single page (One page)	CTRL + End
Save as	F11
In-place edit of fixed text rearrange	F2
Toggle Auto alignment	CTRL + SHIFT + A
Show Property Browser	CTRL + SHIFT + B
Show Logger Window	CTRL + SHIFT + L
Toggle Auto Scroll	CTRL + SHIFT + S
Show Thumbnails View	CTRL + SHIFT + T
Grab JobInfos	CTRL + SHIFT + G
Show Objects panel	CTRL + SHIFT + O
Show/hide object boxes	ALT + F5
Show/hide Conditional Area guides	ALT + F6
Show/hide Region guides	ALT + F7
Show/hide Ruler guides	ALT + F8
Show/hide all boxes/guides	ALT + F9
Recalculate output	F5
Run JavaScript	SHIFT + F5

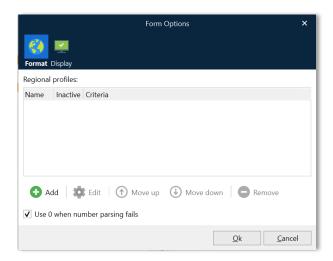


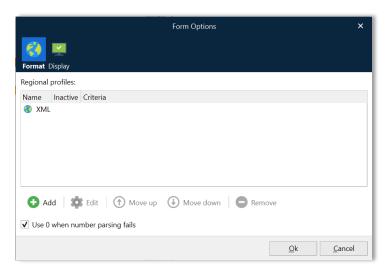
4 Set Up a Form

4.1 Set Up Data Formats

If no regional profile is added in the **Input format** tab, the regional profile which is set in the form options is then applied.

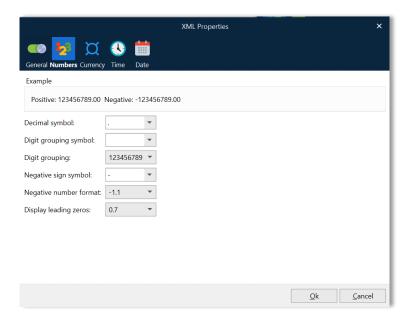
If the grid in **Form Options > Format > Regional Profiles** is empty, you can add a new profile to the grid by clicking the **Add** button:





The next step gives you an option to select one of the existing regional profiles or create a new one. If required, you can assign a criterion for each profile in the list to run specific profiles for individual jobs. The profile where the first matching criteria is met, which is also true, will be executed.



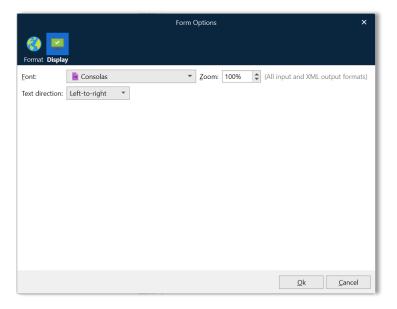


You can define the general form properties for numbers, currency, time and date.

When adding a new regional profile, you can specify criteria for a definite object (for more information, see *Edit Rearrange Properties*). If no regional profile is specified within the **Form Options** dialog, the regional profile which is set as default for the current setup is then applied.

4.2 Modify Form Editor Display Settings

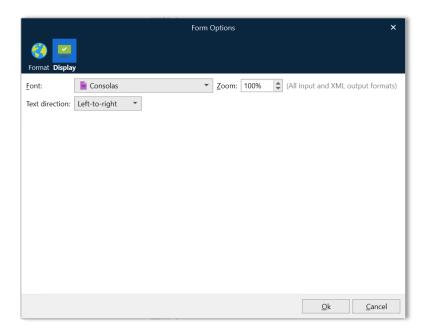
Use the **Display** tab to control the size and type of the input font as well as that of the XML output font. Changes to the font are typically used for supporting the Pacific-Asian character sets.





4.3 Set Text Direction

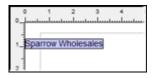
In forms you can define the default **Text direction** for the rearranges to support 'left-to-right' and 'right-to-left text' processing.



This setting influences the way the Form Editor behaves under different circumstances. In-line editing is not supported for fixed text objects if text direction is set to 'right-to-left' in the output settings of the rearrange.

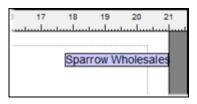
The default position on screen for a new rearrange will vary based on this setting, as follows.

Left-to-right:



Upper left corner of output view.

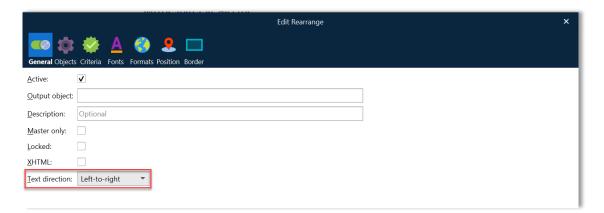
Right-to-left:



Upper right corner of the output view.



The value of the text direction setting in the **Display** option will also influence three default values in the settings of a rearrange:



Left-to-right	Right-to-left
Text direction: Left-to-right Box Horizontal alignment: Left Text Horizontal alignment: Left	Text direction: Right-to-left Box Horizontal alignment: Right Text Horizontal alignment: Right

4.3.1 Punctuation

Punctuation marks at the end of a text string are rendered as if they are placed at the beginning when the writing direction is right-to-left. Punctuation characters are:

- comma,
- full stop .
- exclamation mark!
- question mark?
- semi-colon;
- colon:
- apostrophe '
- quotation marks " "
- hyphen -
- brackets () or []
- slash /
- backslash \

Example of punctuation handling in left-to right mode: "Lasernet has support for left-to-right text writing:"



Example of punctuation handling in right-to-left text mode: ":Lasernet has support for right-to-left text writing"



5 Add a Sheet to a Form

5.1 Add a Sheet

Each of a form's sheets can generate output when Lasernet processes that form. To set up a form to generate an additional output document, add a sheet to the form.

For example, suppose a form already has a sheet that generates an EMF invoice from XML data for printing. You can add a second sheet that generates (from that same data) a PDF invoice that can be included in an order-related email.

Or, you can create multiple sheets that generate notably different output from the same data (for example, differently branded documents that otherwise contain the same information). To do this, you can apply unique sheet criteria to each of a form's sheet so that (depending on some aspect of the input data received when processing a job) Lasernet will process only one of that form's sheets.

Steps

To add a sheet to a form, follow these steps:

- In the lower-left area of the Form Editor window, right-click on an existing sheet tab, then click Add. The Sheet Options window opens.
- 2. On the **General** page of the **Sheet Options** window, change the **Name** of the sheet.
- 3. If necessary, change the **Output type** of the sheet.
- 4. **To add sheet criteria:** Use the tools on the **Criteria** page of the **Sheet Options** window. For more information, see Use Criteria and the Criteria part of the Sheet Options page.
- 5. Make any other necessary changes to the sheet's options. For more information about sheet options, see Sheet Options.
- 6. Click OK.

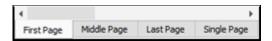


5.2 Pages

The Form Editor uses a page model that enables you to create designs for single-page outputs and multipage outputs. This flexibility enables your sheet design to cater for different input data scenarios.

First, Middle, Last and Single Page

Each sheet has a corresponding **First**, **Middle**, **Last** and **Single** page for formatting output. These pages can contain overlays defining the graphical look of the form, rearranges representing the actual printed data, fixed texts and scripts.



You can access the page setup of each one by right clicking the tab and choosing the menu item **Paper format**.

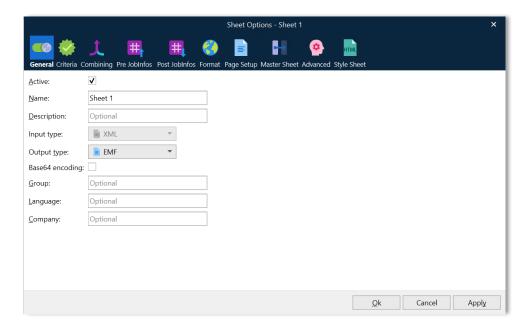
In the **Paper Format** dialog, you can define a pre-defined paper format or enter a custom width and height in millimetres. The page orientation can also be changed between **Portrait** or **Landscape** styles.

The four different page layouts are used to handle forms of varying length. If the conditional area only fills one page, then the **Single** page layout is used. If the data fills two conditional areas, then the **First** and **Last** page layouts are used. For jobs filling more than two conditional areas the **First**, **Middle** and **Last** layouts are used. This provides true flexibility in designing your output pages.



5.3 Sheet Options

You can manage sheet properties by right clicking the sheet tab and selecting **Sheet Options**. Alternatively, on the **Sheet** menu, click **Sheet Options**.



5.3.1 General

Property	Description
Active	Enable or disable the sheet.
Name	Change the name of the sheet.
Description	Add a sheet description (optional).
Output type	Specifies output type for the sheet. After a sheet has been created with a given output type, the setting cannot be changed.
Base64 encoding	If checked, binary data will be converted to ASCII string format
Group	Add a group name for the sheet (optional).
Language	Add the language of the sheet (optional).
Company	Add for which company the sheet belongs to (optional)

5.3.2 Criteria

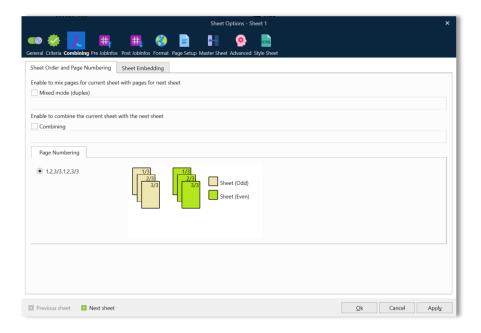
Property	Description
Add Sheet	Add a Sheet Criterion. See Use Criteria.
Add JobInfo	Add a JobInfo Criterion. See Use Criteria.
Edit	Edit the selected criterion.
Remove	Remove the selected criterion.
Move Up	Move the selected criterion up in the list.



Move Down	Move the selected criterion down in the list.
Sheet Expression	Can be used for defining a set of criteria which must be true (or false).
Allow further sheet matching	Uncheck to stop processing sheets to the right of this sheet if the criteria for this sheet match.

5.3.3 Combining

On the **Combining** tab of the **Sheet Options** dialog, you can set the required sheet order option. The page numbering template depends on the selected option.



5.3.3.1 Sheet Order and Page Numbering

The **Mixed Mode (Duplex)** option enables duplex printing (or mixed mode) where pages are printed on both sides (only to be used if you have more than one sheet). To enable duplex mode in a printer, a printer profile must be created with duplex mode turned on. The printer profile containing the duplex mode must be activated for both sheets.

Select the **Always generate even number of pages** checkbox to ensure documents are created with an even number of pages. The option takes an effect if the following conditions are met:

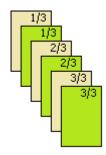
- 1. The current sheet contains fewer pages than the next sheet does.
- 2. The total number of pages for both sheets is odd.

As a result, pages are mixed and a blank page is added to the end of the generated document.

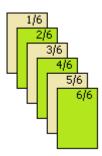


Two-page numbering templates are available in this mode (this setting automatically changes output for the **Page x of y** type of insert text):

a) Total number of pages is specified separately for each sheet:



b) Total number of pages is calculated for both sheets. The generated document has continuous numbering:



When you enable Mixed Mode for the current sheet by selecting the **Mixed Mode (Duplex)** check box, you are not allowed to change the following settings which are disabled on the next sheet:

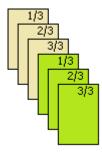
- 1. Sheet Criteria
- 2. Destination
- 3. Reference printer
- 4. Use temporary Files for storing pages
- 5. Only line-break after space
- 6. Sheet Order
- 7. Page Numbering

The **Combining** option enables a consecutive combining of several sheets into one document.

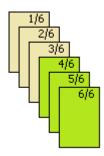
Two-page numbering templates are available in this mode (this setting automatically changes output for the **Page x of y** type of insert text):



a) Total number of pages is specified separately for each sheet:



b) Total number of pages is calculated for all combined sheets. The generated document has continuous numbering:



When the combining option is enabled for the current sheet by selecting the **Combining** check box, you are not allowed to change the following settings which are disabled on the next sheet:

- 1. Sheet Criteria
- 2. Destination
- 3. Reference printer
- 4. Use temporary Files for storing pages
- 5. Only line-break after space
- 6. Page Numbering

You can enable both options at a time. In this case, the same settings as Mixed Mode are disabled. As a result of the mix and combining procedures, the generated document contains the current sheet 'mixed' with the next sheet and then combined with the sheet after.

Note: A combination of the Duplex and Simplex modes is not supported in a combined job for the most printers.

5.3.3.2 Sheet Embedding

Note: This feature is only supported in the server version of Lasernet.

5.3.4 Destinations

Property	Destination
Add	Add a destination.
Edit	Edit the selected destination.
Remove	Remove the selected destination.
Move Down	Move the selected destination down in the list.
Move Up	Move the selected destination up in the list.

A single sheet can have multiple destinations e.g. an EMF sheet can be printed whilst another PDF sheet is sent by email. If you require different designs for each of the output destinations, you need to create a separate sheet for each.

5.3.5 Pre Jobinfos

Here you can add custom JobInfos as well as define values for system variables.

JobInfos added and managed on the **Pre JobInfos** tab are to be run at the **Sheet Start** event point.

5.3.6 Post Jobinfos

Here you can add custom JobInfos as well as define values for system variables.

JobInfos added and managed on the **Post JobInfos** tab are to be run at the **Sheet End** event point.

5.3.7 Format

Property	Destination
Add/Select Regional Profile	Adding a new regional profile, you can make the value active as well as specify criteria for a definite object (for more information, see <i>Edit Rearrange Properties</i>). The profile which meets the first criteria, which is also true, will be executed.
Rounding	Specify how the system should process extra decimals. Truncate: Discard the extra decimals. Round: Round the extra decimals. Ceiling: Map the extra decimals to the smallest following number.
Number of decimals	Specify the number of decimals to be displayed.
Show NaN as	Specify how NaN (Not a Number) should be displayed.
Color negative value	Specify the color for the values which are negative.
Remove trailing zeroes	Select to discard the trailing zeroes.
Show only decimals	Select to show only decimals.
Absolute value	Select to show the absolute value.



Hide if zero	Select to hide the value if it equals zero.
Hide if invalid date	Select to hide the value if date is invalid.
Hide if invalid time	Select to hide the value if time is invalid.

5.3.8 Page Setup

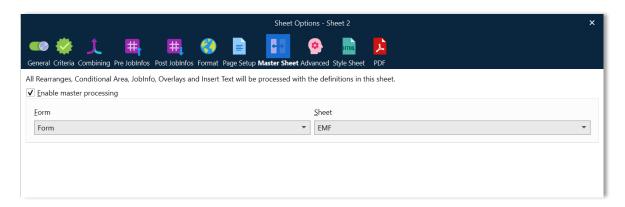
Property	Destination
Paper Size	Allows selecting a pre-defined size format from the drop-down list.
Width	Allows typing custom width in millimetres.
Height	Allows typing custom height in millimetres.
Orientation	Switch between Portrait and Landscape page orientation.

5.3.9 Master Sheet

Lasernet supports master sheet processing, which is a technique used for populating rearranges, conditional areas, JobInfos, and text inserts from one sheet to another in a form. For example, a form could have two sheets, Original and Copy, where the only difference is that an extra text insert with a "COPY ONLY" text is required on the Copy sheet. Rather than manually duplicating all the settings from one sheet to another, the Copy sheet can be instructed to use the Original one as the Master sheet, leaving only the overlay to be configured.

You access the master form processing dialog via the menu **Sheet** > **Sheet Options** > **Master Sheet**.

Only forms and sheets compatible with the selected input and output formats are available in the selection list.



The **Select Rearrange Master** dialog has the following properties.

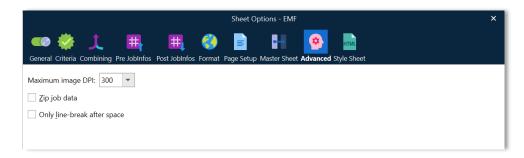
Property	Description
Form	Choose the form which contains the master sheet (only the current form is supported in this version).



Sheet	Choose the sheet, to serve as the master sheet, from the same form.
Enable master form processing	This check box is used for enabling master sheet processing.

5.3.10 Advanced

On the **Advanced** tab of the **Sheet Options** dialog, you can manage the memory usage and quality for images as well as for processing jobs with many pages.



Property	Description
Maximum image DPI	Specify the maximum image resolution for image(s) added to the output.
Zip job data	Not supported in this version.
Only line-break after space	Select to allow line-breaks only after a space (not supported in this version).

5.3.11 Style Sheet

Use the **Style Sheet** tab to add CSS (Cascading Style Sheets) for all XHTML rearranges available on the sheet using the internal way which stands for a <style> element.

```
Sheet Options - EMF

Sheet Options - EMF

General Criteria Combining Pre JobInfos Post JobInfos Format Page Setup Master Sheet Advanced Style Sheet

body {
    margin: 0px;
    padding-top: 30px;
    padding-bottom: 30px;
}
```



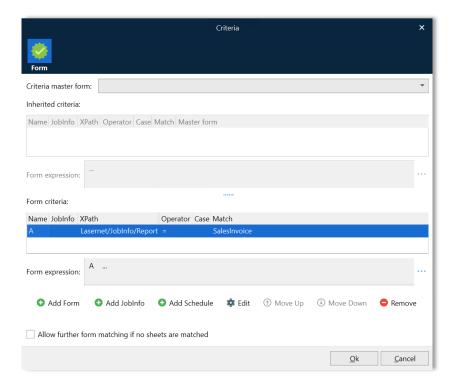
The style added here can be overwritten for a particular XHTML rearrange using the **Style Sheet** tab of the **Edit Rearrange** dialog (for more details, see *Edit Rearrange Properties*).



6 Specify the Data That Each Form Is Used For

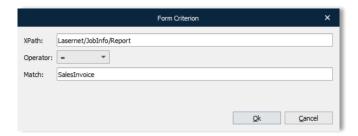
To control which form is used to process incoming data, you can add form criteria to each form.

The way that you create form criteria for a form depends on the form's input data type. For more information about criteria (including subjects such as form expressions), see *Use Criteria*.



You can define form criteria that enables Lasernet to recognize specific XML. This is done by selecting the **Criterion** tool and marking a node (tag) value.

The window that enables you to define criteria has the following properties.





XPath

The name of the XML node, including the top node.

Operator

You choose the operator type that you want to use. In the example above, the value of the chosen XML node must be equal to "SalesInvoice".

The following operators are available in the drop-down box.

Operator	Description
exists and not exists	You can choose to let Lasernet test whether a tag name exists within the XML input file or not by using the operators "exists" and "not exists" and leaving the match string empty. Choosing any of the other available operators will force Lasernet to assume that the tag name exists and that the text data in the tag must match the match string according to the chosen operator.
contains	Returns true if the text data contains the match string.
not contains	Returns true if the text data does not contain the match string.
like	Returns true if the text data matches the regular expression.
not like	Returns true if the text data does not match the regular expression.
=	Returns true if the text data matches the match string exactly.
<>	Returns true if the text data does not match the match string exactly.
Operators < <= > >=	These operators try to convert the value of the text data and the match string to numbers before comparing them. It is possible to make numerical comparisons. If either one of the text strings do not convert to a number, a regular string comparison is conducted.

Example: If you want to test if a tag name exists, use the operator "exists" and leave the match string empty.

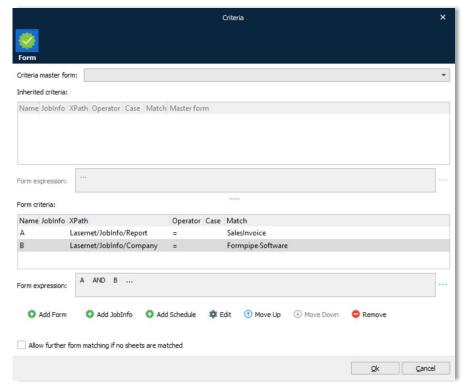
If you want to test if the text data contains only numbers you need to use the operator $\bf like$ and set the value field to $\bf \backslash d+$. This means that regular expressions are used.

Match

The value (criterion) of the XML node.



On the **Form** menu, click **Criteria** to get an overview of the defined criteria.



From the **Criteria** dialog, you can manually add additional criteria and/or JobInfos.

Allow further form matching if no sheets are matched: If this option is enabled, when criteria are not matched for all sheets, the next recognized form from the form engine list will be processed, if any.

Note: The **Allow further form matching if no sheets are matched** setting is only supported in the server version of Lasernet.

6.1 Use Criteria

You can define various criteria for your forms to enable the form to recognize input data.

Lasernet supports the following types of criteria:

 Form: Lasernet looks for key data in specific locations in the data input to ensure that the right input data has been received.

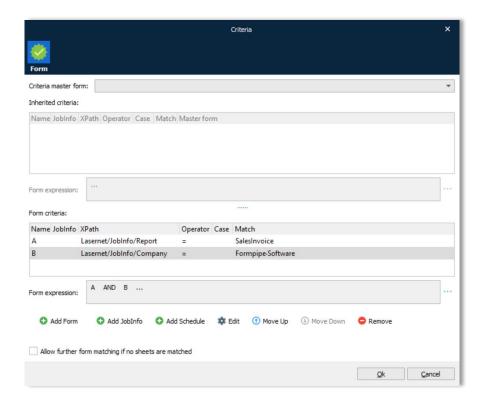
Note: If no criteria are specified for a form, the form is not processed.



 Sheet: Use the sheet criterion to look for key data in specific locations in a data input file. If no matches are found the sheet is not processed.

JobInfo criteria can also be added to provide the user with additional methods for recognizing input data files.

Criteria are defined in the left-hand window of the Lasernet Form Editor by using the Criteria tool and marking an area with the mouse. It is also possible to manually add criterion from within the **Criteria** dialog accessed via the **Form** > **Criteria** menu.



It is possible to define several different criteria within the same form. To this end, use the **Criteria** dialog while defining a criterion, or later by choosing **Form** > **Criteria** to see a list of all the defined criteria.

From the **Criteria** dialog, you can also manually add additional criteria, add JobInfos, edit or remove existing criteria and change the priority of the criteria.

6.1.1 Form Expressions

In the Criteria dialog you can define a form expression as a logical expression. The following are examples of possible expressions:

- A and B and C and D
- (A or B) and (C or D)

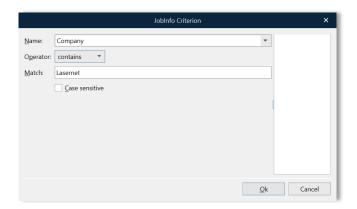


• (A or B) and not (C or D)

By default, all criteria are true if no form expression has been defined. The form expression field allows for a high degree of flexibility when defining rules for the Lasernet Form Engine to use when recognizing data input files.

6.1.2 JobInfo Criteria

You can include JobInfos in the list of criteria for a form. A JobInfo criterion can only be added manually by clicking the **Add JobInfo** button.

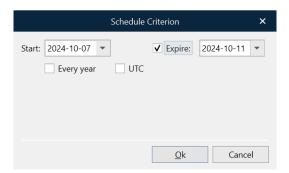


In the Edit Jobinfo Criteria dialog you define the following values:

- Jobinfo Name: Select the Jobinfo that you want to work with from the dropdown list. In the example the Jobinfo 'FileName' is chosen. You can also write the name of one of your own custom Jobinfos.
- Operator: Define the type of operator. In the example, the physical filename of the input data file must contain the string 'inv'.
- Match string: Write the value to match for the specified JobInfo.

6.1.3 Schedule Criteria

You can include a Schedule in the list of criteria for a form. A Schedule criterion can only be added manually by clicking the **Add Schedule** button.





- **Start:** The date from which the criterion is true. Choose a date from the calendar.
- **Expire:** If checked, this is the final date on which the criterion will be true. Choose a date from the calendar.
- Every year: If selected, the criterion will be true between the specified **Start** and **Expire** dates (day and month) every year.
- UTC: If checked, UTC time will be used instead of the server time.

6.1.4 Criteria Master Form

Criteria added to a form which is specified by a user as a criteria master form are inherited by the current form.

```
NewInvoice1.0 Criteria = Invoice

NewInvoice1.1 (Criteria = Invoice) and (Company = 10)

NewInvoice1.1.1 (Criteria = Invoice) and (Company = 10) and (Amount > 200)

NewInvoice1.2 (Criteria = Invoice) and (Company = 20)

NewInvoice1.2.1 (Criteria = Invoice) and (Company = 20) and (Amount > 200)

NewInvoice1.2.2 (Criteria = Invoice) and (Company = 20) and (Customer = 1000)

NewCreditNote1.0 Criteria = CreditNote
```

The master form cannot be executed if a child form matches the criteria.

Note: The feature is only supported in the server version of Lasernet.



7 Design a Form

7.1 Select and Move Form Objects

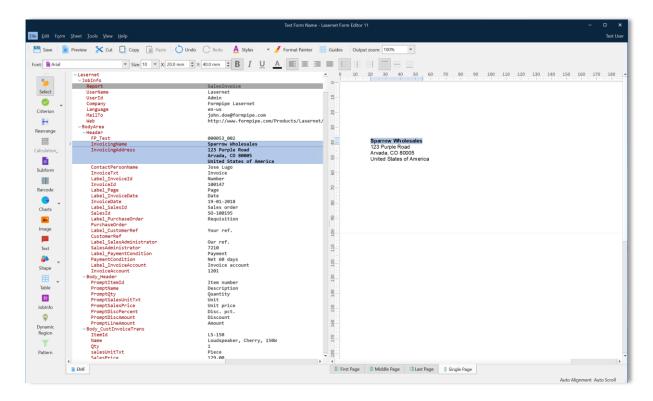
When the select tool is active, you can select previously defined areas and input data elements on the left side of the window, and you can select objects in the form design on the right side of the window. When you have selected an object on either side of the Form Editor window the connected object on the opposite side will be automatically selected as well.

7.1.1 Select Tool

You activate the object selection tool by clicking the **Select** button in the toolbar.



After you select an object, you can change its properties by right-clicking it or using the toolbar, and you can move it.



7.1.1.1 Several Patterns Matching the Lines

If there are one or more patterns matching the lines you wish to select after clicking the **Rearrange** tool, you can press Shift prior to releasing the mouse. A context menu is then displayed showing all patterns



matching the selected line. Select the desired pattern to create conditional rearrange or select **Sheet** to create an absolute rearrange.

7.1.2 Change the Position of an Object

An object can be moved to another position in several different ways. First, highlight the object(s) using the Select tool. The mouse cursor will then change to and you can drag the object to a new position by keeping the left mouse button held down and releasing it when the object has been relocated. You can also use the arrow keys on the keyboard or type in specific X/Y coordinates in the property bar or the properties dialog (accessible by double-clicking the object).

Alt + arrow moves in smaller steps (so does Alt + mouse).

Shift + mouse moves in one direction (horizontal or vertical).



7.2 Add Static Text to a Sheet

Use the insert text tool to add fixed (in other words, unchanging) text to the form design. To activate the tool, click the **Text** button in the toolbar.



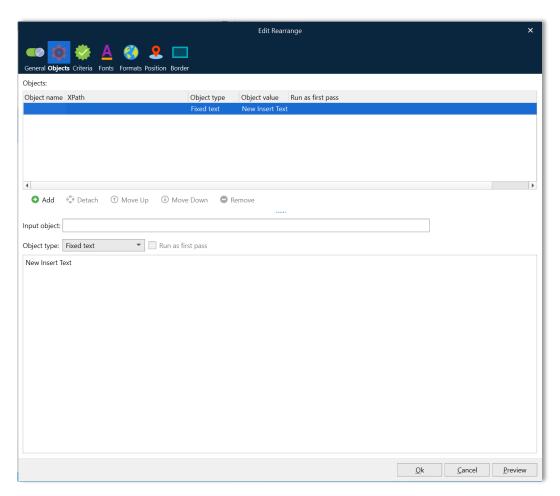
Text can be also added to an existing rearrange by clicking the **Add** button below the object list (on the **Objects** page of the **Edit Rearrange** or **Edit XML Rearrange** window).

Steps

Follow the steps in the relevant following section.

Click the **Text** button, then click in the form design area to choose where to position the text.

To modify the text, right-click the text in the form design, then click **Objects**.





You can write any fixed text in the field to be included in the output panel.

Or, you can also edit the fixed text directly in the output view.

To initiate the in-place edit mode, do one of the following:

- Right-click the object and select In-place edit.
- Select the object and press F2

Now you can edit fixed text, adjust font and formatting settings. For example, colour, bold, and font size can be changed. You can also drag and drop text or copy/cut and paste it to another position.

Note: You cannot edit fixed text with a specific format applied – for example, number or date.

When you have made the required changes, do one of the following to save changes and exit the in-place edit mode:

- Click elsewhere on the screen
- Press F2
- Press Ctrl+Enter



7.3 Add Input Data to a Sheet

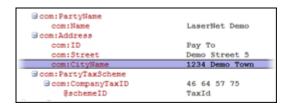
The rearrange tool is one of the most important functions in Lasernet Form Editor. It is used to define input variables in the input data and map them to output fields in forms.

You activate the rearrange tool by clicking the **Rearrange** button in the toolbar.



7.3.1 Create a Rearrange

Activate the rearrange tool and click an element within the XML structure. The element will be highlighted and (for most output types) a corresponding field will be added to your form design.



In the above example, an XML tag named 'CityName' has been marked as a rearrange. You can then access the input properties of the rearrange by right-clicking it and choosing **Properties** from the menu. The properties are essentially the same as for non-XML input files, except for the position information which is irrelevant in XML.

7.3.2 Rearrange Properties

To modify the properties of the rearrange (for example, change the font and text size), see *Edit Rearrange Properties*.

7.3.3 Several Patterns Matching the Lines

If there are one or more patterns matching the lines you wish to select after clicking the **Rearrange** tool, you can press Shift prior to releasing the mouse before clicking the mouse on an XML element. A context menu is then displayed showing all patterns matching the selected line. Select the desired pattern to create conditional rearrange or select **Sheet** to create an absolute rearrange.

7.3.4 Instance Qualifiers

When you work with conditional rearranges, you can use the **Instance(s) qualifiers** option. It allows you to extend pattern expressions with the ability to specify:

- 1. All instances (the option is selected by default),
- 2. First instance,



- 3. Middle instance(s) which are all non-first and non-last,
- 4. Last instance,
- 5. Single instance which is the only one existing line of the pattern

or:

- 1. All instances of the pattern (the option is selected by default),
- 2. All consecutive instances of the pattern,
- 3. All instances of the pattern within a region,
- 4. All instances of the pattern within a group.



Note: The controls for the **Instance(s) qualifiers** group box are disabled if the settings are already specified for the pattern to which the rearrange(s) belong.

Note: Instance qualifiers are only supported for conditional rearranges added to a pattern. They are not applicable to rearranges added to an absolute fixed position.



7.4 Add Dynamic Elements to a Sheet

Use the insert text tool to add dynamic elements (such as current date, current time, a JobInfo value, or the output of a script) to the form design. To activate the tool, click the **Text** button in the toolbar.



You can add the following types of dynamic element.

Element type	Description
Current time	Displays the current time.
Current date	Displays the current date.
Current date and time	Displays both the current time and current date.
JobInfo	Inserts the value of a JobInfo.
Page x of y	Inserts page numbering on the output pages where x = current page number and y = total number of pages. For example, 'Page 3 of 5'
Script	Inserts a script on the output form for execution. Run a JavaScript to parse input data before result is inserted in output. Run as first pass option is an advance option, required when the size of the output object, differs from the size of input object, which has influence on the calculation for the line height and the total number of pages.

Note: The method for adding dynamic elements to a form design depends on the form's output data format.

Note: Dynamic elements can be also added to an existing rearrange by clicking the **Add** button below the object list (on the **Objects** page of the **Edit Rearrange** or **Edit XML Rearrange** window).



7.5 Add Data Calculations to a Sheet

You activate the calculation tool by clicking the **Calculation** button in the toolbar.



The calculation tool enables you to perform simple calculations with the data.

The available operations are described below.

7.5.1 Conditional Rearranges

Calculation	Description
Sum	Generates a script rearrange in the output calculating the sum of all values of the conditional rearrange. The rearrange is inserted below the end of the conditional area enabled for the current page type.
Subtotal Current Page	Generates a script rearrange in the output calculating the sum of all values of the conditional rearrange on all pages up to and including the current page. The rearrange is inserted below the end of the conditional area enabled for the current page type.
Subtotal Previous Page	Generates a script rearrange in the output calculating the sum of all values of the conditional rearrange on all pages except the current page. The rearrange is inserted above the beginning of the conditional area enabled for the current page type.
Sum Group	Generates a script rearrange in the output performing the sum of all values of rearranges selected within a group. The script rearrange is inserted relative to the last instance of the group.
Sum Region	Generates a script rearrange in the output performing the sum of all values of rearranges selected in one or more regions. You have the following options to insert the script rearrange: • Insert sum after any selected region.
	Insert sum after any region containing selected object names

7.5.2 Multiple Absolute and Conditional Rearranges

Calculation	Description
Add	Generates a script rearrange in the output calculating the result of the addition of all selected rearranges. The rearrange is inserted just below the bottom-most of the selected absolute rearranges and to the right of the selected conditional rearranges.
Subtract	Generates a script rearrange in the output calculating the result of subtracting all selected rearranges from the first selected rearrange.
Multiply	Generates a script rearrange in the output calculating the result of multiplying all selected rearranges.



Divide	Generates a script rearrange in the output calculating the result of dividing the first selected rearrange by all selected rearranges.
	0 ,

The generated script rearrange can be edited and further calculations can be added.

To run JavaScript, on the **View** menu, click **Run JavaScript**. Alternatively, press Shift+F5.

This rearrange has a specific format and **Name** properties are set automatically for selected rearranges if they have not been set before. The generally defined input format (see *Set Up Data Formats (Regional Profiles)*) is used for parsing input, and generally defined output format (see *Sheet Options*) is used for parsing output. It is also possible to override these settings on a rearrange basis, if needed.



7.6 Add Images to a Sheet

Use the insert image tool to add an image. To activate the tool, click the **Image** button in the toolbar.



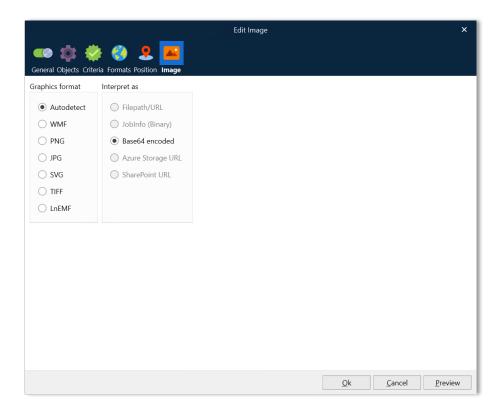
7.6.1 Interpret as Base64

If an image is presented as a Base64 string, you can add an image rearrange using the **Base64 encoded** option.

Note: Other types of "Interpret as" are only supported in the server version of Lasernet.

7.6.2 Image Properties

You can access the image properties via the **Edit Image** dialog. To open the **Edit Image** dialog, double-click the image.



7.6.3 Image Tab Properties

Property	Description
Graphics format	This group box contains radio buttons for each of the graphics formats supported by Lasernet:



	• WMF
	• PNG
	• JPG
	SVG (Tiny)
	• TIFF
	• LnEMF
	Autodetect
	If the Autodetect radio button is selected, the image is inserted to the output preserving the format in which the image is stored in the Images folder. We recommend that you select this option if the image file name indicates the file extension. If the file extension is not indicated, you can manually select a graphics format using the radio buttons.
Interpret as	Used to interpret the value indicated on the Input tab of the Edit Rearrange window:
	Base64 encoded

7.6.4 Position Tab Properties

Property	Description
Upscale	Selecting the check box allows you to proportionally scale the image you have inserted to the output, according to the values specified in the Width and Height text boxes. The check box is enabled if Auto Width+Height is selected in the Size type list. If the check box is cleared, the image can be scaled to full size regardless of the values indicated in the Width and Height text boxes.

7.6.5 Formats Tab Properties

***************************************	1010 1 01111010 1 010 1 1 0 0 0 11100	
Property	Description	
Hyperlink	If the Active checkbox is selected, the URL in the Address field will be opened when the image is clicked. Click the Formats tab to create a hyperlink. Once the Active checkbox is selected, the Hyperlink tab becomes enabled, and you can enter any URL into the Address field. This functionality is useful only if you are going to generate a PDF document as a result of processing of the current sheet. You can insert an embedded JobInfo as a part of the hyperlink to include a dynamic value as a part of the URL.	



7.7 Add Shapes to a Sheet

Use the **Shape** tool to add lines, rectangles, or rectangles that have rounded corners to the form design.



Note: Shapes can be added only to forms that generate EMF-based output.

7.7.1 Draw a Line or Shape

To add a line or a shape, follow these steps:

- Click the down arrow next to the Shape button, then select Line, Rectangle, or Rounded Rectangle. The Shape button is now selected.
- 2. In the form design area, move the cursor (which is now a plus sign) to the start point of the new line or rectangle.
- 3. Drag the cursor to draw the line or to define the area of the rectangle.

When you release the left mouse button, Form Editor adds the line or rectangle to the form and then automatically switches to **Select** mode. Now, you can double-click the shape to modify it. For example, you can specify its line color. Or, you can drag the shape to move it, and drag its resize handles to resize it.

7.7.2 Draw Another Line or Shape

Click **Shape**, then use the cursor to add the shape to the form.

To draw a different shape, click the down arrow as described in the steps above.

7.7.3 Draw a Series of Shapes that are Linked to a Pattern in the Input Data

Because of its pattern criterion, a pattern can match multiple line items in the input data. By linking a shape to a pattern, you can automatically add multiple shapes that each correspond to a particular line item.

For example, if the input data is an invoice that contains several line items, you could (in one action) add several rectangles; you could use each one to visually enclose a particular line item in the output form. When you do this, Form Editor will adjust the vertical spacing of any existing rearranges that are also linked to that pattern, so that the data of each line item and its corresponding shape are vertically aligned.

To add shapes that are linked to a pattern, click **Shape**, then (in the input data area) drag the plus cursor to select the pattern.



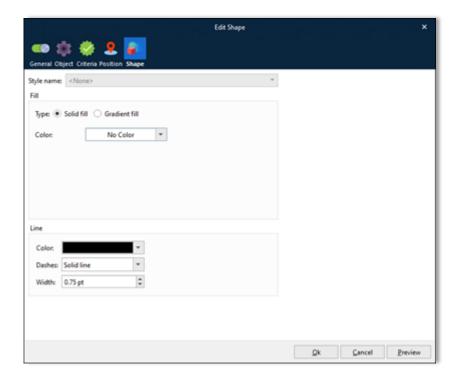
7.7.4 Prevent Anyone from Moving or Resizing the Shape

Right-click the shape and then select Lock.

Or, on the **General** page of the **Edit Shape** window (that you use to modify the shape), select **Locked**.

7.7.5 Modify the Shape's Properties

Double-click the line or rectangle to open the **Edit Shape** window. On the **Shape** page, the following shape-modification properties are available.



Properties	Description	
Style name drop-down li	st (available for all shapes)	
Style name	If any named shape styles exist, select a style from this list to apply it to this shape. Note: You cannot create named styles here.	
Fill group box (available for rectangles and rounded rectangles only)		
Туре	Select Solid fill (single color) or Gradient fill (multiple colors). For more information about gradient fills, see <i>Apply a Gradient Fill to a Rectangle or Rounded Rectangle</i> .	
Color	If you selected Solid fill: Set the fill color. If you selected Gradient fill: See Apply a Gradient Fill to a Rectangle or Rounded Rectangle.	
Direction, Gradient stop, Position, and	These properties are relevant to gradient fill only. See Apply a Gradient Fill to a Rectangle or Rounded Rectangle.	



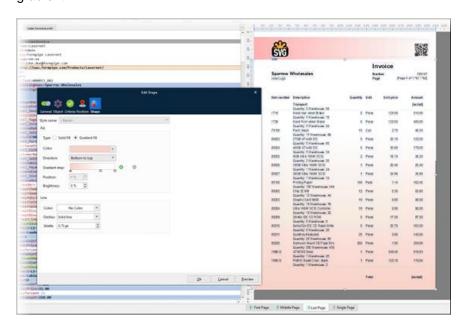
Brightness		
Line group box (availa	Line group box (available all shapes and lines)	
Color	Set the color.	
Dashes	Set the line style.	
Width	Set the line width.	
Rounding group box on the Position tab (available for the rounded rectangle only)		
Width Width ellipse	Define the width of the ellipse (which affects the corner rounding).	
Height Height ellipse	Define the height of the ellipse (which affects the corner rounding).	
Left / top, Left / bottom, Right / top, and Right / bottom	The checkboxes enable you to choose which corners the rounding is applied to. Unselected corners become 90-degree angles.	

Note: The properties on all the other pages in the **Edit Shape** window are described in *Edit Rearrange Properties*.

7.7.6 Apply a Gradient Fill to a Rectangle or Rounded Rectangle

A gradient fill is a transition between colors. A gradient fill can transition between just two colors, or it can transition through a series of colors. For example, a rectangle's fill can transition from black to white, or it can transition from black to gray to white.

In the example of gradient fills below, a rectangle that uses a gradient fill covers the whole page to form the background of the output document. The **Edit Shape** window (on the left) shows the bottom-to-top gradient **Fill** settings for the shape, and the outcome is displayed on the right. Also, at the top of the page, a different rectangle uses a left-to-right gradient fill.



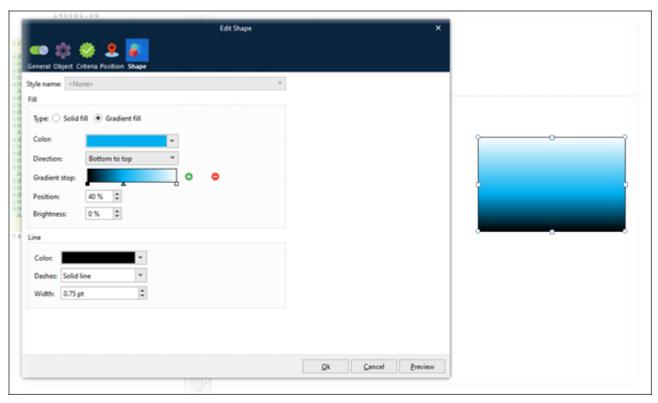


An essential part of creating a gradient fill is creating gradient stop points. Each gradient stop specifies the color at a specific stage of the fill. So, a gradient fill must have at least two gradient stops (one at the left-side 0% (start) position and another at the right-side 100% (end) position), but can have additional gradient stops at intermediate percentage positions.

For example, if there are three gradient stops (**Position** 0% with **Color** black, **Position** 40% with **Color** blue; **Position** 100% with **Color** white) the fill will begin in black, transition to blue over the first 40% of its extent, then transition to white over the rest of its extent.

To use a gradient fill on a shape, follow these steps:

- 1. Double-click the shape to open the **Edit Shape** window.
- 2. Navigate to the **Shape** page, then click **Gradient fill** (in the **Fill** area).
- 3. Select a Direction.
 - The gradient stop points specified in the following step are applied to the shape in the order specified by Direction.
 - For example, if the Gradient stop bar is white at its left side (the 0% position) and black at its right side (the 100% position), and Direction is Bottom to top, the shape's fill will be white at its bottom end and black at its top.





- 4. Create gradient stop points to design the fill that you want to apply to the shape:
 - a. Click the existing 0% gradient stop and configure it.
 - i. Color: Choose a color for the selected gradient stop.
 No Color is not supported.
 - ii. **Brightness:** Use this control to make small brightness adjustments to the color. 0% results in the **Color** that you selected. A negative brightness value darkens the color; a positive value brightens it.

Note: The selected gradient stop is displayed as a triangle under the color bar.

- b. Repeat the preceding step for the 100% gradient stop.
- c. Add new points if necessary. To add a new gradient stop point:
 - i. Decide where you want to add the stop point, then click the stop point to the left of that position.
 - ii. Click the **plus** icon (to the right of the color bar). Form Editor will add a stop point halfway between the selected stop point and the next stop point.
 - iii. Specify the new point's Color, Position (use the up and down arrows beside the position % value to change the position of the selected gradient stop), and Brightness.
- 5. Click **minus** to delete points, if necessary.
- 6. Click **Preview** to see the effect of your settings on the shape. If necessary, adjust the fill settings.
- 7. Click **Ok** to apply the fill to the shape.

Tip: Multiple gradient stops can have the same **Color**. So, if you want a fill to transition from black to white over the first 70% of the shape, then stay white for the remaining 30% of the shape, specify three gradient stops: **Position** 0% with **Color** black, **Position** 70% with **Color** white, **Position** 100% with Color white.

Note: A gradient fill cannot be applied to a rotated shape. So, if a shape has a gradient fill, its **Rotation** control (on the **Position** page of the **Edit Shape** window) is grayed out. If a shape's **Rotation** is not 0%, you cannot select **Gradient fill** on the **Shape** page of the **Edit Shape** window.

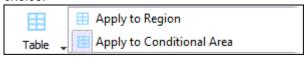


7.8 Add Tables to a Sheet

You can create tables, can be applied to a region or a conditional area (for more details, see *Position Form Objects in Specific Areas of a Sheet*).

To add a table, follow the steps listed below:

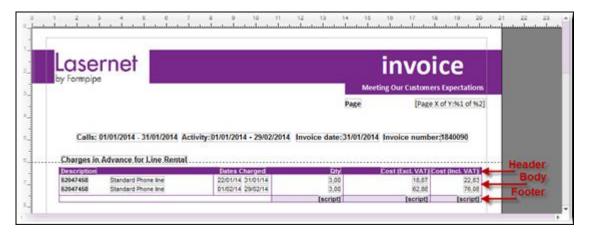
 On the toolbar, click the Table tool and then click Apply to Region or Apply to Conditional Area depending on your choice.



2. When the pointer becomes a cross, mark the area to define the outer boundaries of the table outlining the required rearranges which belong to a region or a conditional area.

As a result, rearranges of a region or a conditional area are organized within the table. The number of columns in the table you have added corresponds to the number of outlined rearranges available in a region or a conditional area.

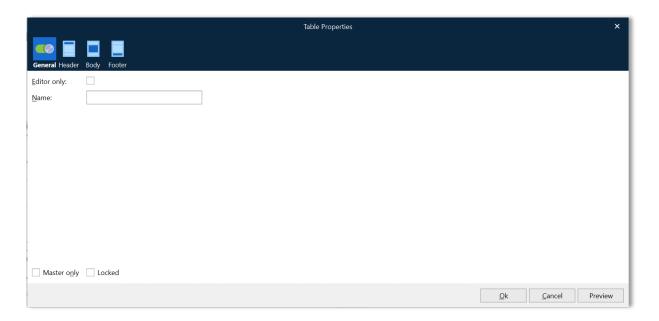
Each table is presented by header, body and footer.



7.8.1 Table Properties

To access table properties, right-click the table you have added, then click **Table Properties** on the context menu that appears. Alternatively, double-click in a table you have added.





The **Table Properties** dialog contains the following tabs:

- General
- Header
- Body
- Footer

Each tab has the following command buttons:

- **Ok** closes the **Table Properties** dialog and saves all the changes made.
- Cancel closes the Table Properties dialog without saving any changes made.
- Preview previews the table in the output, including any
 modified settings, but does not apply them. To apply modified
 settings, click the Ok button.

7.8.2 General

Use the **General** tab to specify the general table settings.

Note: The controls for the **General** tab are the same for tables applied to a region and a conditional area.

The table below details the controls on the **General** tab.

Control	Description
Editor only	Select the checkbox to hide the table in the generated file. All the settings you have configured for the table are saved, and the table is temporarily hidden.



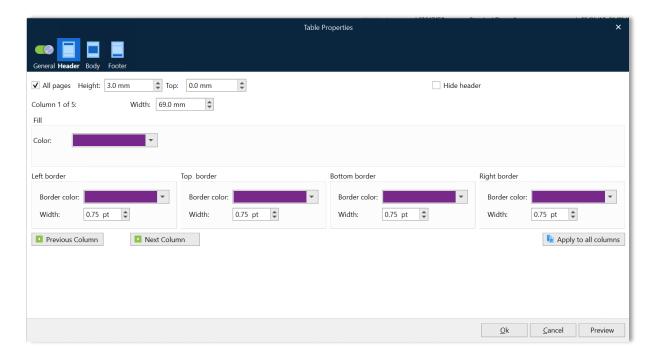
	To display the table in the generated file, with all the table settings applied, unselect the checkbox.
Name Type a descriptive name for the table.	
Master only Select the checkbox to display a table on the Master sheet only, not child sheets (sheets inherit data from the Master sheet). Locked Select the checkbox to prevent a table from being moved or resized	

7.8.3 Header

Use the **Header** tab to specify settings for the table header. The header settings for tables applied to a conditional area can be set for each column and page separately. You can apply header settings to all columns and all pages at once. The header for tables applied to a region can be set for all pages at once.

Note: Controls for the **Header** tab differ for tables applied to a region and a conditional area.

The picture below shows the **Header** tab with settings for tables applied to a conditional area.



The table below details the controls on the **Header** tab with settings for tables applied to a conditional area.

Control	Description
Relative to	Contain the following options:



	Top of cond. area: Locates the table header relative
	to the top of a conditional area.
	Note: The control is only available for tables applied to a conditional area. It is not available for tables applied to a region.
Height	Use the spin box to specify the header height.
Тор	Use the text box to specify a fixed (Top of page) or a relative (To cond. area) Y position of the header on a page.
Width	Use the spin box to specify the column width. Note: Specifying the width for the header, you automatically specify the width for the whole column including the body and footer.
Show even if no data	Select the checkbox to show a table on the page(s) being generated even if there is no conditional data on those pages.
Hide header on page	Select the checkbox to hide the table header on the page for which you specify settings.
Fill color	Fills the header of the selected column on the specified page with a color. To do this, click the arrow in the control, and then click a color in the palette. For more choices, click Custom Color .
Border color	Specifies the color of the header borders: left, top, bottom and/or right. To do this, click the arrow in the control of the required group box (Left Border, Top Border, Bottom Border and/or Right Border), and then click a color in the palette. For more choices, click Custom Color.
Border width	Specifies the border width of the header: left, top, bottom and/or right. To do this, use the spin box to set the border width value (Left Border, Top Border, Bottom Border and/or Right Border).
Previous Column	Click the button to switch to the previous column for specifying the header settings.
Next Column	Click the button to switch to the next column for specifying the header settings.
Apply to all columns	Click the button to apply the specified header settings for one or all of the columns at once.
First	Select the radio button to specify the header settings for the first page. Note: The control is only available for tables applied to a conditional area. It is not available for tables applied to a region.
Middle	Select the radio button to specify the header settings for the middle page(s). Note: The control is only available for tables applied to a conditional area. It is not available for tables applied to a region.
Last	Select the radio button to specify the header settings for the last page. Note: The control is only available for tables applied to a conditional area. It is not available for tables applied to a region.
Single	Select the radio button to specify the header settings for the single page. Note: The control is only available for tables applied to a conditional area. It is not available for tables applied to a region.

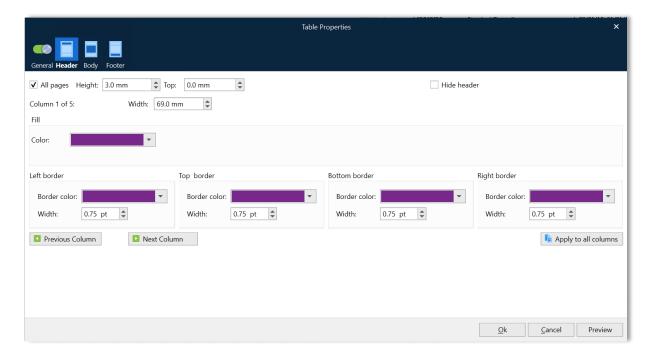


Apply to all pages

Click the button to apply the header settings you have specified for all pages at once.

Note: The control is only available for tables applied to a conditional area. It is not available for tables applied to a region.

The following picture illustrates the **Header** tab with settings for tables applied to a region.



The table below shows the settings for the **Header** tab for tables applied to a region.

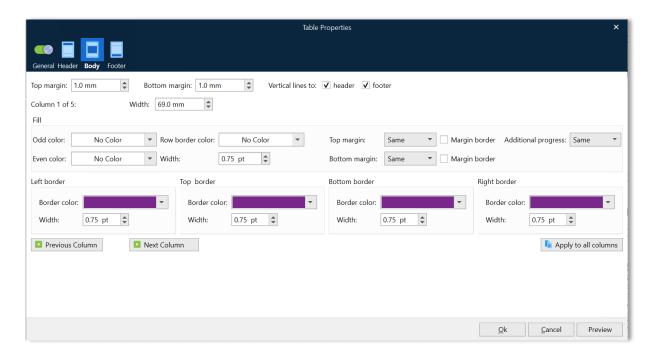
Control	Description
All pages	Select the checkbox to show the header on all pages where the table is available.

7.8.4 Body

Use the **Body** tab to specify the table body settings.

Note: Controls for the **Body** tab are the same for tables applied to both a region and a conditional area.





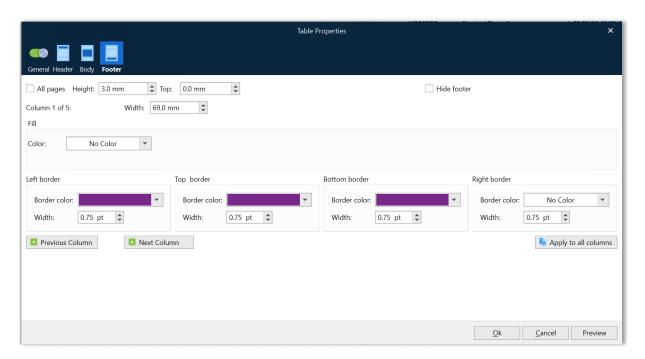
The table below details the controls for the **Body** tab. Most settings are the same as for the **Header** tab.

Control	Description
Top Margin	Use the spin box to specify an interval in millimetres between the header and the conditional data (rearranges).
Bottom Margin	Use the spin box to specify an interval in millimetres between the footer and the conditional data (rearranges).
Vertical lines to header	Clear the checkbox to separate the body from the header if the latter changes its position on the page.
Vertical lines to footer	Clear the checkbox to separate the body from the footer if the latter changes its position on the page.
Odd color	Allows specifying a color for instances defined as odd.
Even color	Allows you to specify a color for instances defined as even.
Row border color	Allows you to specify a color for a border of a row.
Width	Allows you to specify a width value for a border of a row.
Top margin	Allows you to specify a color style for a top margin, if any, based on the value specified for the first pattern instance per page (same or different), or setting no color at all.
Bottom margin	Allows you to specify a color style for a top margin, if any, based on the value specified for the last pattern instance per page (same or different), or setting no color at all.
Margin border	Select the required check box to add a border for the top and/or bottom margins respectively.
Additional progress	Allows you to define a color for an additional progress of groups and/or regions, if any: same as for a previous pattern instance or no color at all.



7.8.5 Footer

Use the **Footer** tab to specify settings for the table footer. The settings are similar to those of the table header.



Note: Controls for the **Footer** tab are the same for tables applied to both a region and a conditional area.

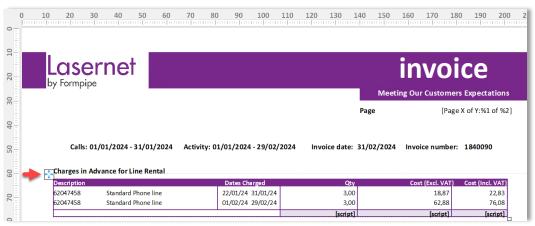
7.8.6 Manipulate Table

You can manipulate a table you have created in the output. Manipulations affect the table on all the pages.

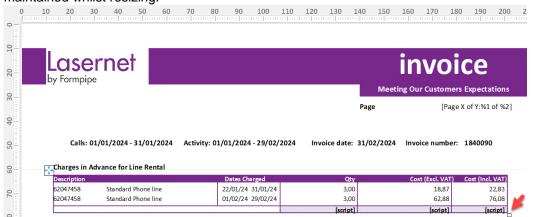
- Right-clicking on a table will bring up the context menu. From here you can:
 - Edit the **Table Properties** by clicking on the corresponding option.
 - o Remove the selected table, by clicking **Delete Table**.
- To move a table, hover the mouse over it and the table move handle will appear. Using the table move handle, drag the table







 To resize a table, hover the mouse over it and a sizing handle (a little square) will appear. Click and drag the handle to make the table larger or smaller. The height and width ratio will be maintained whilst resizing.



- To change a column width, rest the cursor on right side of the column boundary you want to adjust, until it becomes a resize cursor (a double-headed arrow), and then drag the boundary until the column is the desired width.
- To change a cell width, rest the cursor on the right edge of the cell you want to adjust until it becomes a resize cursor (a doubleheaded arrow), then hold down Ctrl and drag the edge of the cell until it is the desired width.
- To merge columns, right-click the shared edge between the columns you want to merge, and then click Merge Columns on the context menu.
- To insert a column, right-click the right side of the column where you want to insert a new column, and then click Insert Column on the context menu.



You can lock a table to prevent it from moving and resizing. To do this, select either the **Lock** command on the context menu or the **Locked** checkbox on the **Table Properties** dialog box.

7.8.7 How To

This section provides further information about settings for tables applied to conditional areas (for more details, see the top of this Tables part of the guide). To modify table settings, open the **Table Properties** dialog.

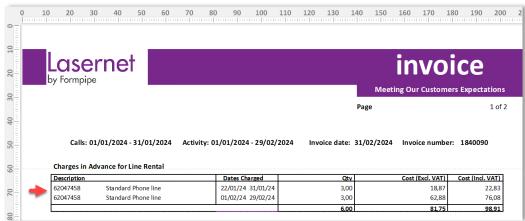
7.8.7.1 Set Table Header

To change the table header settings, follow the example steps below:

- 1. Switch to the **Header tab** of the **Table Properties** dialog.
- 2. Specify the header height value in the **Height** spin box.
- Select the column where you want to set the width and fill color.To do this, use the **Previous Column** and **Next Column** buttons.



- 4. Once you have selected a column, use the Width spin box to specify the header width and Fill Color to choose a solid color. To do this, click the arrow next to the color picker control, and then click the color you want; or click Custom Colors for more choices. If you do not want to apply any fill color, click No Color.
 - If you want to apply the fill color you have specified to all columns, click the Apply to all columns button.
- To change the border width for the header, use the corresponding spin box under each border group (Left, Top, Bottom, and Right).
 - For example, it is possible to just change the outline borders of the header. To do this, specify the same color and width value for the left and top borders of the first column, the right and top borders of the last column, and the top border for the rest of columns.



If you want to apply the border color and width you have

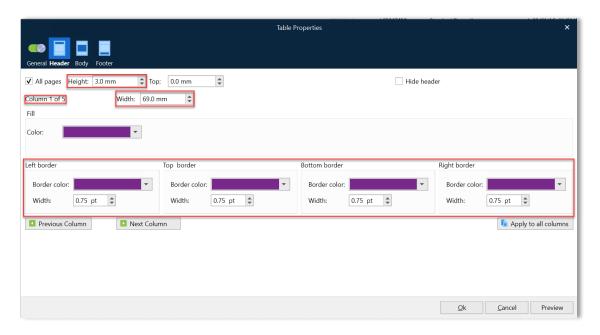


specified to all columns, click the **Apply to all columns** button.

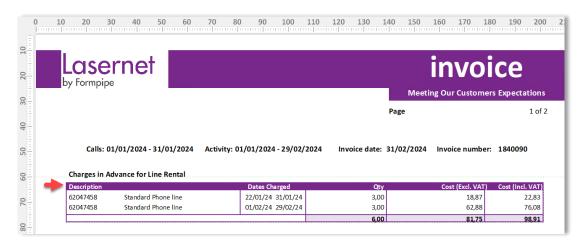
- Once you have specified the header settings, you can apply them
 to the first, middle, last, or single page by selecting the
 corresponding radio button, or to all pages by clicking the Apply
 to all pages button.
- 7. Once you are done, click **OK**.

If you want to preview the table in the output with settings you have specified (but without applying them), click the **Preview** button.

The following picture is of the **Table Properties** dialog showing the properties from the above example:



The following picture shows the table header with the applied settings:





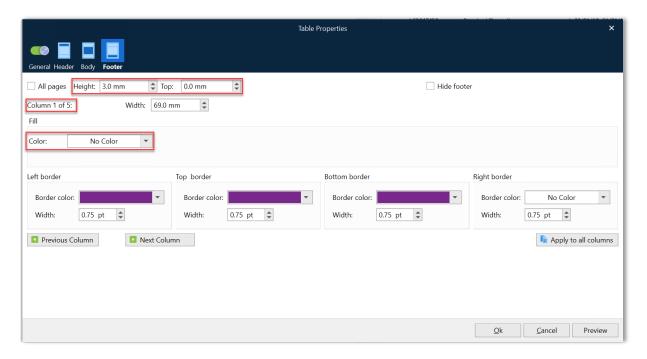
7.8.7.2 Set Table Footer

To change the table footer settings, follow the example steps below:

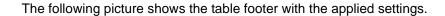
- 1. Switch to the **Footer tab** of the **Table Properties** dialog.
- From the Relative to drop-down list, select End of cond. area (Absolute) to locate the footer relative to the end of the conditional area (not selectable when tables are added to a region).
- 3. To change the **Y** position of the footer on a page relative to the end of the conditional area, use the **Top** text box.
 - As per the example, apply the setting for the last page by selecting the **Last** radio button once you have typed the **Top** value.
- To only show the footer on the last page, use the radio button to select the **First** page and uncheck the **Hide footer on page** box. Repeat this step for the **Middle** page.
- 5. Once you are done, click the **OK** button.

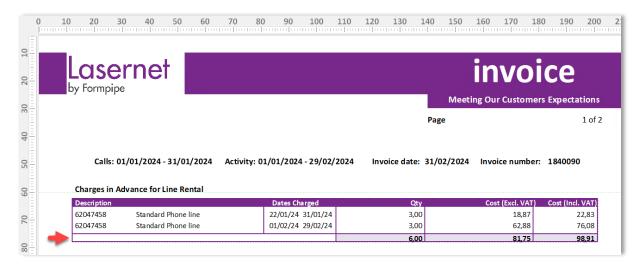
If you want to preview the table in the output with settings you have specified (but without applying them), click the **Preview** button.

The following picture is the **Table Properties** dialog showing the properties from the previous example applied to the first column.

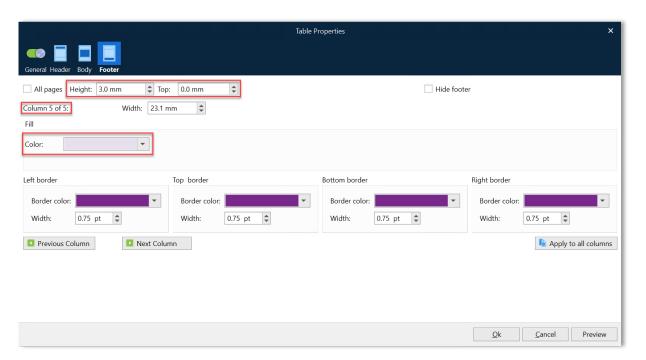






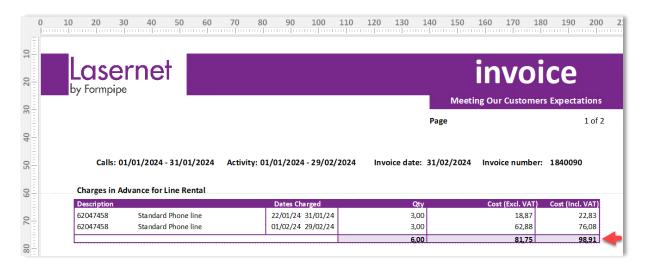


The following picture shows the **Table Properties** settings for the footer in the last column:





The following picture shows the table footer with the applied settings in the last column:



7.8.7.3 Set Table Body

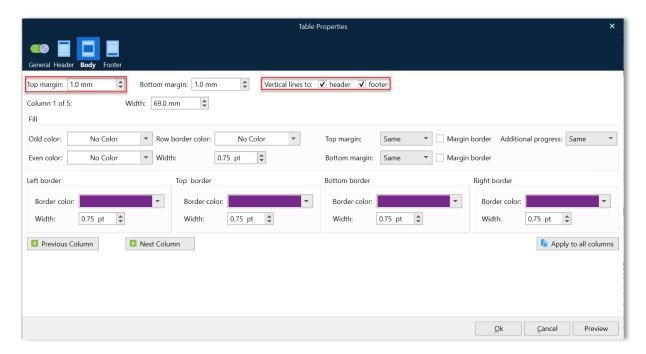
To change the table body settings follow the example steps below:

- 1. Switch to the **Body tab** of the **Table Properties** dialog.
- 2. Use the **Top Margin** spin box to specify the interval in millimetres between the table header and the conditional data located in the first row of the table body.
- To separate the table body from the footer on the last page only, select the Last page radio button and clear the Vertical lines to footer checkbox.
- 4. Once you are done, click the **OK** button.

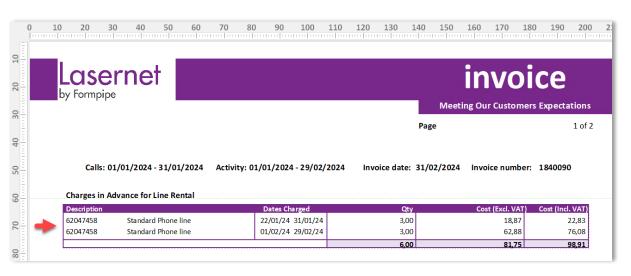
If you want to preview the table in the output with settings you have specified (but without applying them), click the **Preview** button.



The following image is the **Table Properties** dialog showing the properties from the example above:



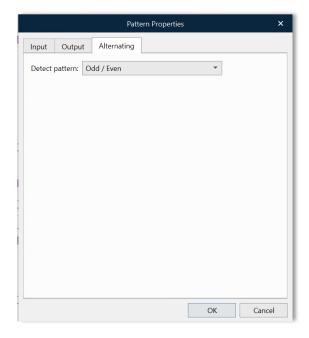
The image below shows the body with the applied settings:





7.8.7.4 Define Pattern(s) in the Input

On the **Alternating** tab of the **Pattern Properties** dialog, select the **Detect pattern** value (for example, the **Odd / Even** value).

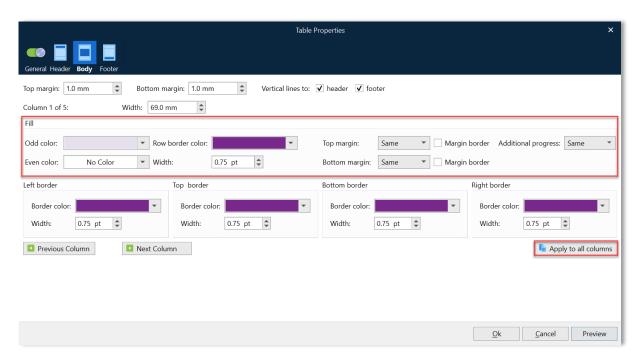


- 1. Open the **Table Properties** dialog on the **Body** tab.
- 2. To apply the **Alternating** option, use the controls on the **Fill** group box. For more details about the controls available in the **Fill** group box, see the **Body** tab table.
- 3. Once you are done, click the **Apply to all columns** and **Apply to all pages** (not shown for regions) buttons to apply the above settings to all available columns and pages respectively, and then click the **OK** button.

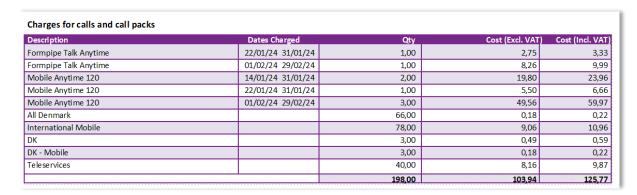
If you want to preview the table in the output with settings you have specified (but without applying them), click the **Preview** button.



The following image is the **Table Properties** dialog showing the properties from the example above:



The following image shows the table body with the applied settings:

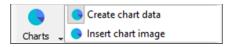




7.9 Add Charts to a Sheet

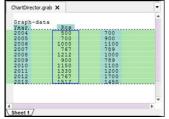
If a sheet's output type supports the use of charts, you can add them to the form design.

The charts tool allows you to define the data for a chart in the input and insert a chart image in the output.



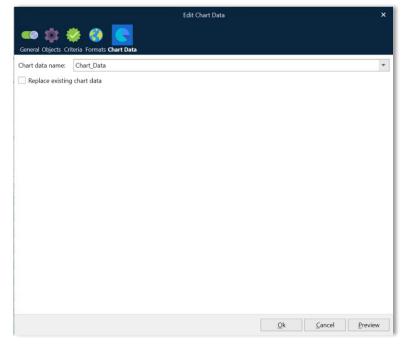
To define chart data in the input, proceed through the steps listed below:

- 1. On the toolbar, click the little arrow next to the **Charts** tool and then click **Create chart data**.
- 2. When the pointer becomes a cross, mark the area to define the data to be shown in the chart. Or, for some input data types (such as XML), you can click the input data value.



Note: This example is based on text as input format, but collecting chart data is similar for XML as input format.

3. If you want to edit the chart data, double-click the defined area. From the **Edit Chart Data** dialog, switch to the **Chart Data** tab.





See the table below to learn more about the tab controls:

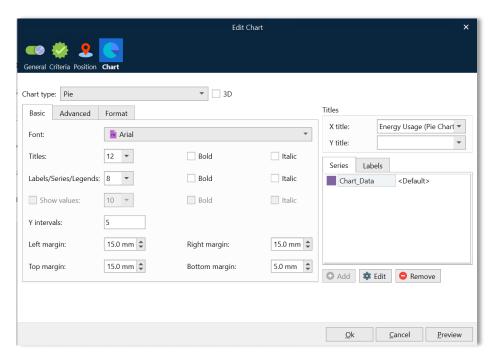
Control	Description
Chart data name	A descriptive name for the chart data as defined in the input.
Replace existing chart data	If selected, any other chart data with the same name is replaced.

The next step is to define all of the data sets for the chart type. For example, label data is required for all chart types; XTitle and YTitle data is required for xy-charts only.

Note: A chart is an absolute rearrange and cannot be added to a pattern. It can only be added to the output. However, a chart can be located relative to different entities (for more details, see *Position Properties*).

To create the output object (a chart image), proceed through the steps listed below:

- 1. On the toolbar, click the little arrow next to the **Charts** tool and then click **Insert chart image**.
- 2. When the pointer becomes a cross, mark the area to define the chart position in the output.
- 3. When releasing the mouse, the **Edit Chart** dialog opens with the **Chart** tab.



For detailed information about common controls see *Edit Rearrange Properties*.



The table below has more information about output specific controls.

Control	Description
Chart type	Using the drop-down list, it is possible to select a chart type.
3D	Select the check box to change the chart from a 2D to a 3D representation.
X Title	Use the drop-down list to select the chart data value or add a fixed text title for the X-axis.
Y Title	Use the drop-down list to select the chart data value or add a fixed text title for the Y-axis. The Y Title can contain an index with two values for "Pareto" and "Bar + Line" charts. The first value for the Y-axis title is positioned to the left and second value to the right.
Series	Allows you to define a series for the chart. Use the Add, Edit, and Remove buttons to manipulate the chart data values available in the tab.
Labels	Allows you to specify the chart data value or add fixed text labels for the chart. Use the Add, Edit, and Remove buttons to manipulate the chart data values available in the tab.

Basic tab controls:

Control	Description
Font	Use the drop-down list to select the font to be applied to the X,Y Titles, Labels, Series and Legends.
Titles	Use the drop-down list to select the font size to be applied to the X and Y Titles.
Labels/Series/Legends	Use the drop-down list to select the font size to be applied to the Labels, Series and Legends.
Show values	Select the checkbox to show the data labels for the data points for xy charts.
Bold	Select the check boxes to set the font style to bold for Titles and/or Labels/Series.
Italic	Select the checkbox to set the font style to italic for Titles and/or Labels/Series.
Y Intervals	Use to add the number of intervals available on the Y axis.
Inner Radius	Defines inner radius of the donut chart type.



Left/Right/Top/Bottom Margin	Use to define the margin for each chart side.
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Advanced tab controls:

Control	Description
Labels	Use the drop-down list to define how labels should be shown. The following options are available. XY charts: Horizontal
	Custom. If selected, you can set the angle (in degrees) at which the labels should be positioned, relative to the plot area. Pie charts: Horizontal
	Hide Default value is Horizontal.
Hide border	Selecting the checkbox allows you to hide the borders of the plot area.
Show Legend	Use the drop-down list to determine the legend location and visibility. The following options are available: • Hide • Top • Bottom • Left • Right
Hide legend border	Default value is Hide Select the checkbox to hide the legend borders.
Transparent	Use the drop-down list to set the transparency of the chart (Yes/No).
Y Axis	Sets the position of the y-axis on the plot area (left/right). The default is to the left.
Gap	The amount of space between the bars (or between bar groups for multi-bar layers). Example: a bar gap of 0.2 equates to 20% of the distance between two adjacent bars. A bar gap of 0 means there is no gap in between the bars. The bar gap can



	be negative. In this case, the bars will overlap. For multi-bar layers the Gap refers to the amount of space between bar groups, while Spacing refers to the amount of space between bars within the bar group.
Spacing	This parameter only applies to multi- bar charts. It is the amount of space between the bars in a bar group.
Grid lines	Allows showing or hiding grid lines for a chart. To this end, select the required value from the drop-down combo box. You can select to show horizontal grid lines, or vertical ones, or both, as well as you can select to hide grid lines.

Format tab controls:

Control	Descrption
Left Y-Axis	The format string, using {value} to denote the axis labels for the left Y axis. For example, \${value 2.,} can be used to format the value to 2 decimal points, using "." as the thousand and "," as the decimal separators respectively, and with a '\$' sign in front.
Right Y-Axis	The format string, using {value} to denote the axis labels for the right Y axis. The option is enabled for "Bar + Line" and "Pareto" chart types only.
Values	The format string, using {value} to denote data labels for the data points.
Legend	Defines format of legend text. Parameter substitution is used to allow you to configure exactly what information is contained in the text and its format. For example, when drawing a pie chart with side label layout, the default sector label format string is: "{label} ({percent}%)". When the sector label is actually drawn, Lasernet will replace "{label}" with the sector name and "{percent}" with the sector percentage. So the above label format will result in output that looks similar to "ABC (34.56%)". You can change the sector label format by changing the format string. For example: {label}: US\${value 2} {percent}% The sector label will then become something like "ABC: US\$123.00 (34.56%)". Note: This option only applies to Pie and Donut charts.
Use regional profile	Select the checkbox to use the regional profile (for details, see the Regional Profiles section of the

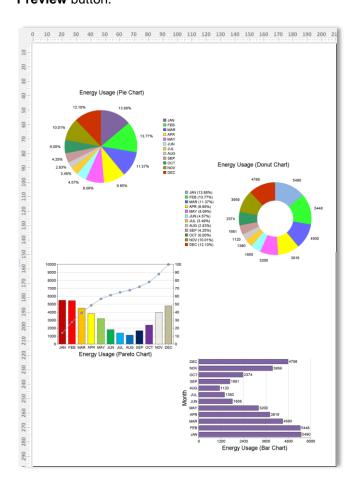


Lasernet Developer guide). It works as follows:

- The regional profile specified for the chart data object (Input tab > Format category is Number > Output Format tab > Select Regional Profile field) in the Series values option (see below) for the topmost series is used.
- Format default values are overruled by the regional profile values.
- If the default values are overruled manually (like {value|2.,}) regional profiles values are overruled.

Once you have specified the required properties for the chart, click the ${\bf OK}$ button to insert a chart image.

If you want to preview a chart in the output, taking into account the properties you have specified but without applying them, click the **Preview** button.





Once you have added the chart, you can resize and move it if necessary.

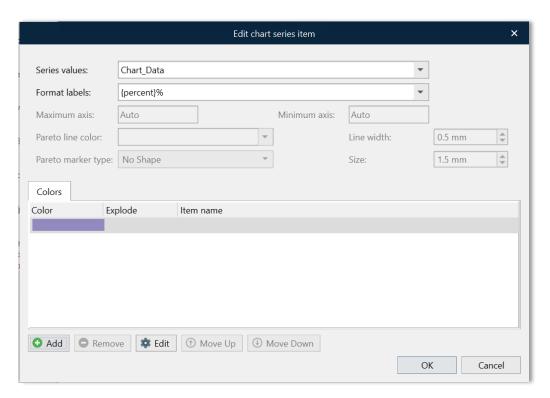
To resize the chart, hover over it and a sizing handle (a little square) appears. Click and drag the handle to make the table larger or smaller. The height and width ratio is maintained.

To move the chart, hover over it and a chart move handle appears. Using the chart move handle, drag the chart to the new location.

In addition, you can also change the corresponding values in the **Edit Rearrange** dialog to move and/or resize the chart.

To edit the chart you have created, right-click it and then click Properties or double-click the chart. The **Edit Rearrange** dialog opens. Use the controls described above to change the chart as required.

You can change a series you have specified using the **Series** tab of the **Edit Rearrange** dialog. To edit a series, select it in the list and click the **Edit** button, or double-click the series record. The **Edit chart series item** dialog appears.



Note: The list of controls and their availability varies depending on selected chart type.



The table below has more information about the various dialog controls:

Control	Description
Series layout	Available only for Bar + Line chart type. Defines which layout series is used for Bar or Line.
Series values	Use the control to specify the chart data to be applied as a data set for the current series.
Series name	Use the control to specify the name for the current series in the legend. By default, the name of the chart data selected within the Series values control is set. In addition, you can select another chart data available in the drop-down list, or type a fixed text to define a series name. If several colors are defined for the series (see Colors description below in this table) the selected chart data will be used to define the item names if they are not already specified.
Format labels	For pie chart types only. Defines the format of label text. Parameter substitution is used to allow you to configure the information displayed and its format. The behaviour is similar to that of Format Legend control described above.
Maximum Axis	Use the control to specify the upper bounds of the Y-axis. Both negative and positive values are allowed.
Minimum Axis	Use the control to specify the lower bounds of the Y-axis. Both negative and positive values are allowed.
Pareto line color	Pareto chart type only. Use the control to specify color of the accumulated line.
Line width	Use the control to set the width of the line.
Pareto marker type	Pareto chart type only. Using the drop-down list, you can select a marker type for the accumulated line.
Size	Pareto chart type only. Use the control to specify the size of a marker.
Colors	Use the tab to define the color of a series (for all chart types) or for each segment\value of the series (only for bar, pareto, donut and pie chart types) or the exploded segment (only for pie and donut chart types) of the chart. Note: If the chart data contains more values than there are colors available, the colors will be recycled. Only one segment can be exploded for the series. Use the Add, Edit, Move Up, Move Down and Remove buttons to manipulate the items available in the tab. If you define colors for each of series segments you can also define the item names which will be shown in legend box for the segment\value.

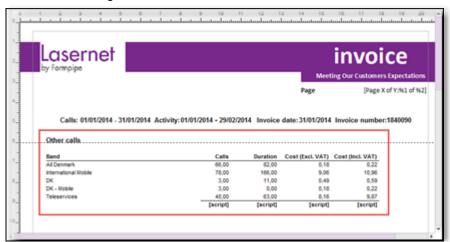
7.9.1 Locate a Chart 'Relative To'

The following example will show you how to locate a chart relative to the bottom of a region. For more details about the 'relative to' options, see *Edit Rearrange Properties*.

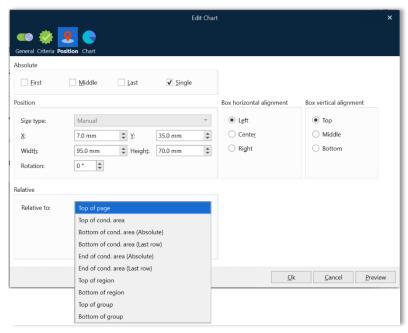
1. In the output, define the region of data relative to where you want to locate a chart. The picture below shows a region of data to



locate our chart against:



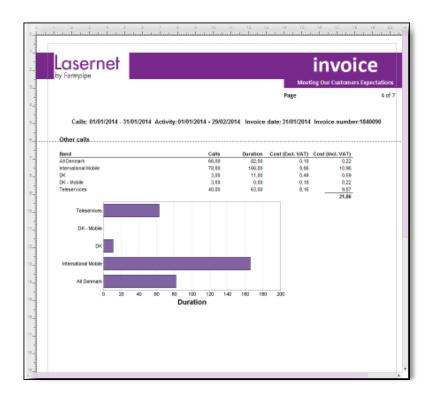
- 2. Add a chart and then edit it, if required.
- Open the Edit Rearrange dialog by right clicking the chart and then clicking Properties or double-clicking the chart you have added.



- 4. With the **Edit Rearrange** dialog open, switch to the **Position** tab.
- From the **Relative to** drop-down list, select your preferred position on the page.
- 6. Once you are done, click the **OK** button.

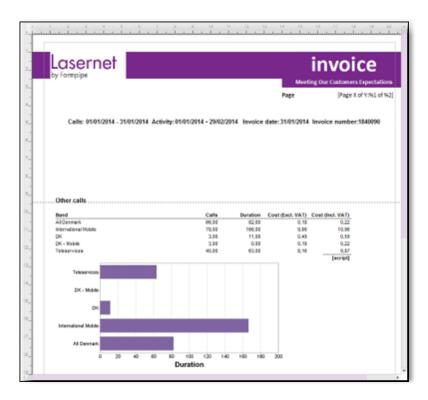
The following image shows the result of locating the chart relative to the 'Bottom of region'.





Note: Once you have located the chart relative to the bottom of the region, the location of the chart is changed if a region is relocated.

The following image shows the difference (the Y-position for the region is modified).





7.10 Add Barcodes to a Sheet

You can add barcodes that are based on input data or fixed text.

A large range of built-in linear barcodes and 2D barcodes (such as QR codes) can be inserted into the form design. A barcode can be inserted and delivered as part of print output or embedded into PDF or TIFF files for archiving, mailing, or other purposes.

The data to encode into a barcode can be read from the input data (to create a rearrange).

Built-in barcodes are inserted as images and are included as a standard feature in Lasernet.

7.10.1 Supported Barcode Types

Lasernet can generate a range of linear and 2D barcode types.

7.10.1.1 Linear Barcodes

Lasernet supports the following types of linear barcode.



Code 128: Alphanumeric barcode with three-character-sets. Supports Code-128, GS1-128 (Formerly known as UCC/EAN-128) and ISBT-128.



Code 39: An alphanumeric bar code that encodes uppercase letters, numbers and some symbols; it is also referred to as Barcode/39, the 3 of 9 Code and LOGMARS Code.



Code 93: Similar to Code 39 but requires two checksum characters.



Codabar: A numeric barcode encoding numbers with a slightly higher density than Code 39.



Interleaved 2 of 5: The Interleaved 2 of 5 barcode symbology encodes numbers in pairs, similar to Code 128 set C.



POSTNET: Used by US post offices for mail delivery and tracking.



UPC, EAN & GTIN: This is one of the most common barcode types. It is used to encode the GTIN as well as to create JAN, ISBN and Bookland barcodes.



7.10.1.2 2D Barcodes

Lasernet supports the following types of 2D barcode.



Data Matrix: A matrix symbol that allows very efficient encoding of data into a square barcode with error correction.



MaxiCode: Used primarily by UPS to route and track packages.



PDF417: This unique 2D barcode type is commonly used on FedEx shipping.



QR Code: A matrix symbol that is capable of encoding binary and ASCII characters. Asian/Kanji characters are not supported. Colored QR codes are supported, in addition to inverted QR codes. For example, white on a black background. You can also add a custom image to the middle of your QR code

Swiss QR Code: A matrix symbol, similar to the QR code, with a Swiss cross in the center. Used for Invoice documents in Switzerland.



For more information about the Swiss QR Code standard, please refer to the Swiss Implementation Guidelines for the QR-bill:

https://www.paymentstandards.ch/dam/downloads/ig-qr-bill-en.pdf

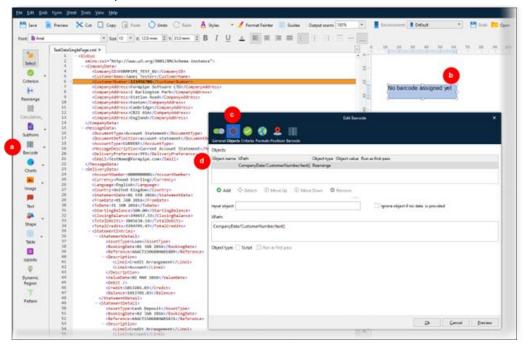
7.10.2 Add a Barcode

To add a barcode to the form design, follow these steps:

- In the Developer toolbar, click **Barcode** (see 'a' in the image below).
- Your next action depends on whether you want to create a barcode from input data. In either case, Lasernet adds a No barcode assigned yet label to the form (b).
 - Create a barcode from input data: In the input data area, click on the input data value that you want to create a barcode from.
 - Manually add data later: In the form design area, click the position in the form design where you want to insert the barcode.



Double-click the New barcode assigned label. The Edit Barcode window opens.



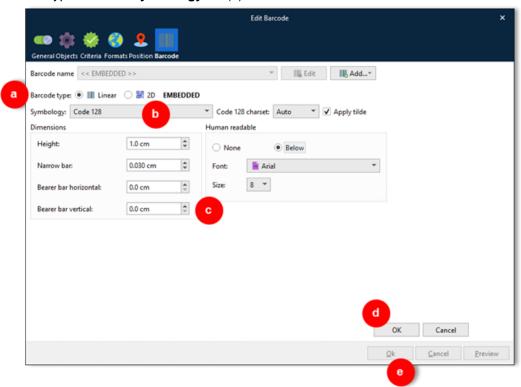
- 4. Click **Objects** at the top of the window (see c in the image above). In this step, you specify the barcode data. The rows in the **Objects** table (d) specify the data that the barcode encodes.
 - If you created the barcode from input data, check that the Rearrange object specifies that the correct data is included.
 - Else, by default, Lasernet will add a "fixed text" object to the barcode. Manually change the default "New Insert Text" value to the data that you want the barcode to encode.
 - Or, to encode data from another source (instead of manually entering it or using input data):
 - a. Click the **Fixed text** object.
 - b. Click Remove (below the Objects table).
 - c. Click Add.
 - d. Change the **Object type** of the new object so that it adds data from another source (for example, you can select **JobInfo** or **Script**).
 Then, provide any necessary information (such as the JobInfo name).

Tip: Regardless of the source of the barcode data, you can add fixed text to it. For example, for some type of barcodes, you might need to add a "Fixed text" object



that prefixes an "application identifier" to the barcode data. For more information and examples, see *Application Identifiers for Code 128* and *Application Identifiers for UCC128*. To add fixed text to existing barcode data:

- i. Click Add.
- ii. Check that **Object type** is **Fixed text**.
- iii. Change the text in the box at the bottom of the **Edit Barcode** window.
- iv. Use the **Move Up** and **Move Down** buttons to appropriately change the order of the objects.
- 5. Click **Barcode** at the top of the window. From this step onwards, you configure the barcode itself.
- 6. Click **Linear** or **2D** (a) beside **Barcode type**. Then select a barcode type from the **Symbology** list (b).



7. Use the rest of the settings on the page (c) to configure the barcode.

Note: Settings vary depending on barcode type and follow industry standards. See *Settings Reference* for more information.

Click **OK** at the bottom of the **Barcode** page to accept the selected settings (d).



9. Click **Ok** at the bottom of the **Edit Barcode** window (e). Lasernet creates the barcode in the form design.



7.10.3 Add Custom Images to QR Codes

You can add a custom image to the center of your QR code. This does not affect the readability of the QR Code.



Note: This feature applies only to standard QR codes; it does not apply to Swiss QR codes.

7.10.3.1 Add an Image to a QR Code

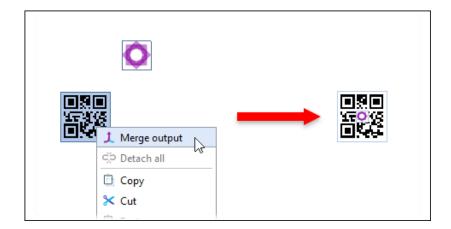
Before you begin, add a QR code to the form design, then add the image to the form design. The following image formats are supported:

- WMF
- SVG
- PNG
- TIFF
- JPEG

To add the image to the QR code, follow these steps:

- 1. Click the image.
- 2. Press and hold Ctrl, then click the QR code. The QR code and image are both selected.
- 3. Right-click the QR code, then click Merge output.



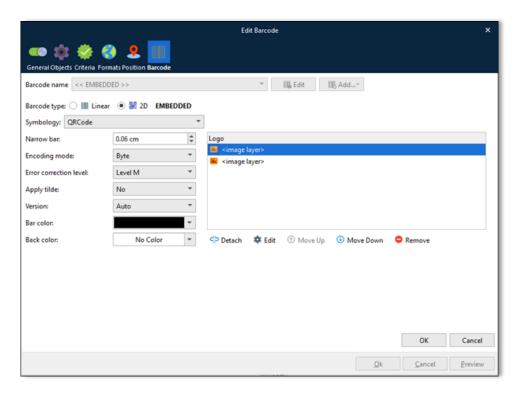


7.10.3.2 Use Multiple Images with a QR Code

A QR code can have multiple images merged into it, but only one image can be displayed in the QR code.

For example, if a company operates two distinct brands, the image that they want to add to the QR code used in a particular document might depend on the brand that the customer (who will receive the generated document) uses. If the name of the brand that they are a customer of is included as text within the input data, the company could add two images to the QR code, then base the criteria (applied to each image) on the brand name data in the input data.

If you merge multiple images into the QR code, more than one image will be listed in the **Logo** list (see image below). If multiple images' criteria are true, the image that appears highest in the **Logo** list will be used.





To change the order of images in the list:

- 1. Double-click the QR code to open the **Edit Barcode** window.
- 2. If the QR code configuration options and **Logo** list are greyed out, click **Edit** (beside the **Barcode name** list).
- 3. Select an image in the list.
- 4. Click Move Up or Move Down.

To add criteria to an image in the list:

- 1. Double-click the QR code to open the **Edit Barcode** window.
- 2. If the QR code configuration options and **Logo** list are greyed out, click **Edit** (beside the **Barcode name** list).
- 3. Select an image in the list.
- 4. Click **Edit** (below the **Logo** list).
- 5. In the **Edit Image** window, click the **Criteria** tab.
- 6. Create the image criteria for the image in this window
- 7. Click OK.

7.10.3.3 Separate an Image from a QR Code

To separate a QR code and an image:

- 1. Double-click to open the **Edit Barcode** window.
- 2. Click the Barcode tab.
- 3. Select the image in the Logo list.
- 4. Click Detach.

7.10.3.4 Delete an Image from a QR Code

To delete an image from a QR code:

- 1. Double-click to open the **Edit Barcode** window.
- 2. Click the Barcode tab.
- 3. Select the image in the **Logo** list.
- 4. Click Remove.



7.10.4 Settings Reference

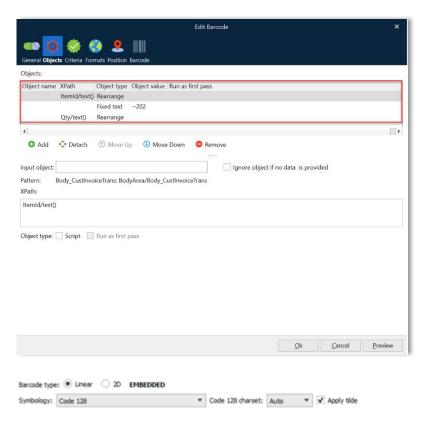
Human Readable

If the barcode has support for human readable characters, you can click **Below** (in the **Human readable** area of the **Edit Barcode** window) and then specify the font type and size you want to use.

7.10.5 Additional Information for Code 128

Application Identifiers for Code 128

May be encoded with \sim 202 as the FNC1 before each application identifier (AI). For example, (01)4075600255149 (30)96 should be entered as: \sim 2020104075600255149 \sim 2023096.





Note: The example above uses data that is carried in JobInfos. Data can also be included in rearranges.

Dimensions Settings for Linear Barcodes

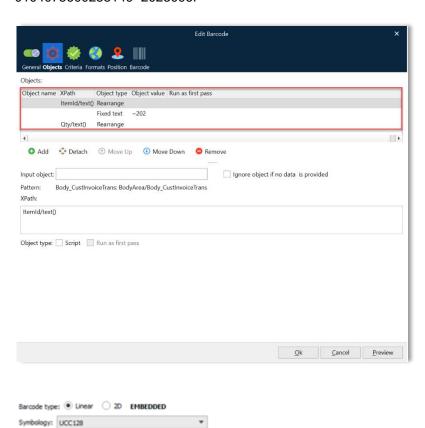
These settings are common to most linear barcodes.



Name	Default Value	Description
Bar Height	1	The height of the barcode in centimeters (CM).
Narrow Bar Width	0.03	Narrow Bar Width is the width in centimetres of the narrow bars. This is also referred to as the X dimension. The default is 0.03 CM, which is about .012" or 12mm. This value may need to be increased if the scanner being used cannot read barcodes with small X dimensions.
Bearer Bar Horizontal	0	The width of the horizontal bearer bars as a multiple of the XDimension; valid options are 0-10.
Bearer Bar Vertical	0	The width of the vertical bearer bars as a multiple of the XDimension; valid options are 0-10.

7.10.6 Application Identifiers for UCC128

Automatic encoded with FNC1 for a single element. May be encoded with ~202 as the FNC1 before each additional application identifier (AI). For example, (01)4075600255149 (30)96 should be entered as: 0104075600255149~2023096.





Note: The example above uses data that is carried in JobInfos. Data can also be included in rearranges.



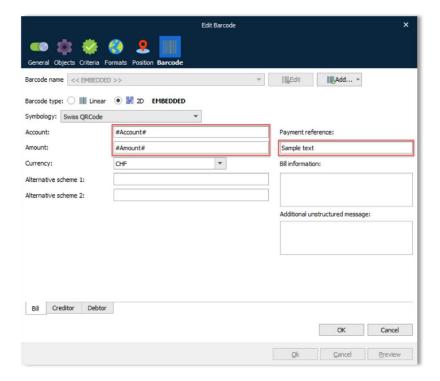
7.10.7 Additional Information for Swiss QR Codes

Values for the Swiss QR Code are inserted as either one of the following:

- As fixed text (as the "Sample text").
- With JobInfo substitution syntax, such as #NameOfJobInfo#, where the values are retrieved via JobInfo objects in the form.

Note: The maximum permitted data content for a Swiss QR code is 997 characters (including the element separators). If the sum of all fields exceeds 997 characters, data fields will be shortened to 50–100 characters depending on the type of line. This will prevent a corrupted Swiss QR code from being produced.

Note: The Amount field can process only data that is in Number format.



7.10.7.1 Swiss QRCode Property Names

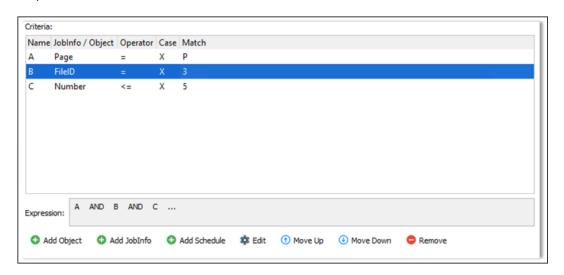
Name	Description
Account	Sets the creditor's account number. Account numbers must be valid IBANs of a bank of Switzerland or Liechtenstein. Spaces are allowed in the account number.
Alternative scheme 1 Alternative scheme 2	Sets the alternative payment scheme(s). A maximum of two schemes with parameters are allowed.
Amount	Sets the payment amount. Valid values are between 0.01 and 999,999,999.99. Note: The Amount field can process data of the Number format.
Bill information	Sets the additional structured bill information.
Creditor	Sets the creditor address.
Currency	Sets the payment currency.



	Valid values are "CHF" and "EUR".
Debtor	Sets the debtor address. The debtor is optional. If it is omitted, setting this field to null or setting an address with all null or empty values is acceptable.
Payment reference	Sets the creditor payment reference. The reference is mandatory for SwissQR IBANs, i.e.IBANs in the range CHxx30000xxxxxx through CHxx31999xxxxx. If specified, the reference must be either a valid SwissQR reference (corresponding to ISR reference form) or a valid creditor reference according to ISO 11649 ("RFxxxx"). Both may contain spaces for formatting.
Additional unstructured message	Sets the additional unstructured message.

7.11 Add Criteria to Form Objects

Using the **Criteria** tab of the **Edit Rearrange** window, you can define one or more criteria to allow the showing or hiding of rearrange(s) in the output.



It is possible to add three types of criteria:

- Object
- JobInfo
- Schedule

When adding an object, both input and output names can be defined for the object. If both the current object and the object value (used as a criterion) are scripts, it is reasonable to use the output object name. The only exception to this is when the **Run as first pass** check box is selected for the object and the value is used as a criterion. In this situation, all the objects are arranged first in the output while applying output values, and only then are scripts processed.



7.12 Position Form Objects in Specific Areas of a Sheet

To control the position of form objects (such as rearranges), you can position them relative to *conditional areas* and *regions*. You can move and resize custom conditional areas.

Note: Unless you create new conditional areas and regions, you use the default conditional area and region.

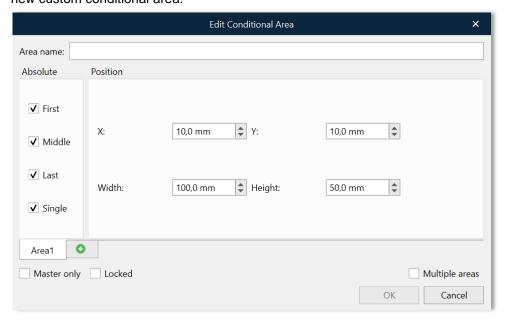
7.12.1 Conditional Areas

Unlike input data, the output form design can contain more than one conditional area. This allows for more flexibility when organizing the data on each page. Form objects (such as a pattern and conditional rearranges) can be positioned relative to a specific conditional area.

There are two types of output conditional areas: default and custom.

Aside from the default conditional area, a custom conditional area can be added by following the steps below:

- 1. On the **Sheet** menu, click **Conditional Area**.
- 2. Alternatively, right-click anywhere in a working space and then select **Conditional Area** on the context menu.
- 3. With the **Conditional Area** dialog displayed, navigate to the **Output** tab.
- 4. Under the **Areas** group box, click the **Add** button.
- 5. With the dialog displayed, indicate the parameters required for a new custom conditional area:





- Area name: Add a name for a new custom conditional area.
- Position: Indicate the X and Y values to set a start point for a new conditional area, and then type the Width and Height values to set a conditional area size.

Note: Once a custom conditional area is added to the output data file, you can move it. First, select the area and when the pointer becomes a four-headed arrow, drag the area to its new position. As a result, the **X** and **Y** values change accordingly.

In addition, you can resize the area by dragging an area side when a pointer becomes a double-headed arrow until the area is the size that you want. To resize the area proportionally, drag an area corner. As a result, the **Width** and **Height** values are changed respectively.

When you move or resize an area belonging to the area batch (multiple areas), you can move/resize only one area of the batch, the rest of areas are changed automatically.

 Absolute: Define page(s) on which the conditional area is to appear by selecting the required check box(es): First, Middle, Last and/or Single. If data (conditional rearranges) does not match the specified page(s), data is cut.

Note: Default conditional area settings do not have any check boxes as they appear on every page by default.

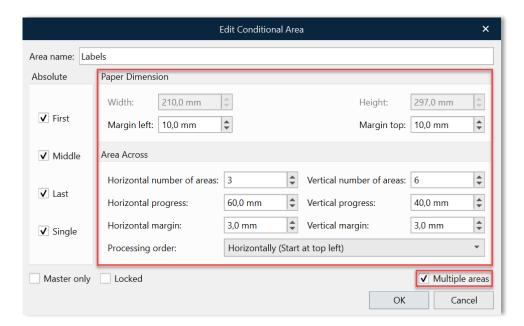
 Area: Click the plus button to add a new area. Each custom conditional area can have more than one area allowing you to organize data in the output file to present a special layout, for example newspaper-style layout. Position, size and availability on page(s) can be defined for each area.

Note: Applies only if **Multiple areas** is not selected.

- Master only: Select the checkbox to apply the custom conditional area to the Master sheet only and not to the child sheets (sheets inherit data from the Master sheet).
- Locked: Select the checkbox to prevent the area from being moved or resized.
- Table: Click the button to open the Table Properties dialog. For more details, see *Table Properties*. The button is disabled if the table is not applied to the current conditional area.
- **Multiple areas:** Select the checkbox to create multiple areas at a time.



If you select the **Multiple areas** checkbox, you can specify the following parameters.

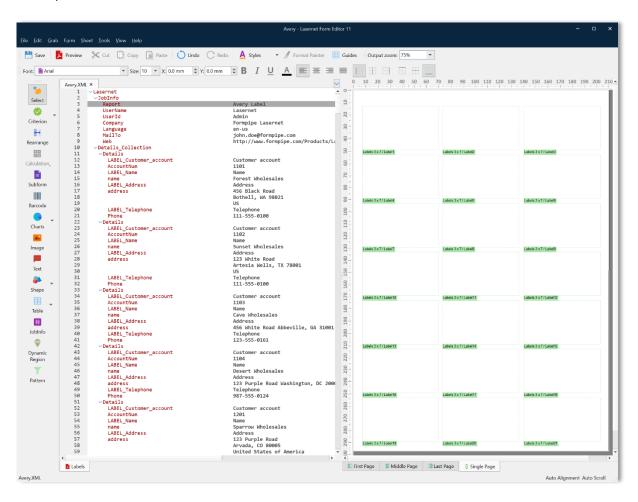


Paper Dimension Parameter	Description
Width	The field is disabled. The value for the field is taken from the paper setup.
Height	The field is disabled. The value for the field is taken from the paper setup.
Margin left	Denotes a space between the edge of multiple areas and the left page edge.
Margin top	Denotes a space between the edge of multiple areas and the top page edge.

Area Across Parameter	Description
Horizontal number of areas	Denotes a number of areas to be added horizontally.
Vertical number of areas	Denotes a number of areas to be added vertically.
Horizontal progress	Denotes a width of each single area belonging to a batch.
Vertical progress	Denotes a height of each single area belonging to a batch.
Horizontal margin	Denotes a distance between areas horizontally.
Vertical margin	Denotes a distance between areas vertically.
Processing order	Denotes the order areas are presented and enumerated in the batch.



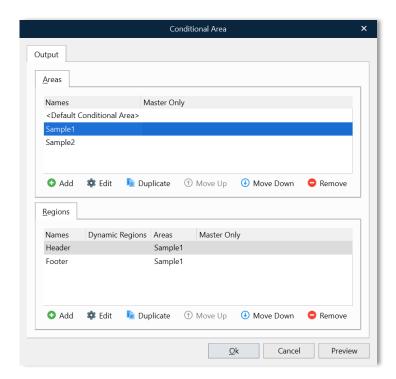
In the next illustration you can see an example of adding multiple areas to the output.





7.12.2 The Output Tab of the Conditional Area Window

The **Output** tab of the **Conditional Area** window has the following controls and properties.



Area Controls	Description
List of areas	Contains <default area="" conditional=""></default> which is listed by default and has fixed position parameters, and custom areas (if added).
Add	Adds a custom conditional area.
Edit	Edits the selected conditional area in the list. In addition, you can also edit the selected conditional area by double-clicking. Note: For the default conditional area, it is possible to define settings for each page separately. For a custom conditional area, it is possible to define settings for all pages at once.
Duplicate	Creates a copy of the selected conditional area in the list.
Move Up	Moves the selected conditional area up one position in the list.
Move Down	Moves the selected conditional area down one position in the list.
Remove	Removes the selected conditional area from the list.



The tab contains the following controls and properties of regions.

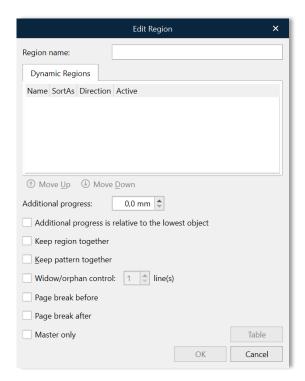
Regions Controls	Description
List of regions	Contains regions (if any have been added). Each region is shown by its name and the conditional area it belongs to.
Add	Adds a region to a specific conditional area.
Edit	Adds the selected region to the list.
Duplicate	Creates a copy of the selected region in the list.
Move Up	Moves the selected region up one position in the list. Once you move the region up in the list, it is moved up in the output file layout as well.
Move Down	Moves the selected region down one position in the list. Once you move the region down in the list, it is moved down in the output file layout as well.
Remove	Removes the selected region from the list.

7.12.3 Regions

Regions allow you to organize data (patterns) in the output file. One or more regions can be added to the default and/or a custom conditional area.

In the **Output** properties of the conditional area, you can also add, edit, remove, and arrange regions.

To add a region, under the **Regions** group box on the **Output** tab of the **Conditional Area** dialog, click the **Add** button. With the dialog box displayed, you can specify the following region properties.





E C. B. C.	
Edit Region Controls	Description
Region name	Add region's name.
Additional progress	Define the size of the vertical margin after the region output.
Additional progress is relative to the lowest object	An additional progress will automatically be added to the bottom of the region if an object included in the region is higher than the total progress summarized for all objects.
Keep region together	If enabled, Lasernet keeps all patterns related to the region together on the same page.
Keep pattern together	If the checkbox is selected, Lasernet keeps all the consistently located lines of the pattern together on the same page. If the checkbox is cleared, Lasernet does not keep all pattern lines together on the same page.
Widow/orphan control	If the checkbox is selected, Lasernet avoids putting one or more paragraph-ending lines at the top of a page (widows) and leaving one or more paragraph-starting lines at the bottom of a page (orphans). You can set a number of lines to be considered widowed/orphaned.
Page break before	If the checkbox is selected, a page break is inserted before the region output.
Page break after	If the check box is selected, a page break is inserted after the region output.
Master Only	If the check box is selected, the region and related patterns only apply to the Master sheet, not to the child sheets (sheets inherit data from the Master sheet).
Table	Click the button to open the Table Properties dialog. For more details, see <i>Table Properties</i> . The button is disabled if the table is not applied to the current region.

To edit the region properties, double-click the region record in the list.

You can reassign a region from one conditional area to another if needed. To do this, drag the region from the list to the chosen conditional area in question located under the **Areas** group box.

7.12.4 Dynamic Regions

Dynamic Regions are an extended functionality of regions and allow you to organize data (patterns) in the output file with even greater flexibility. One or more dynamic regions can be added to an existing region to organize data within it according to the specified properties.

Use the dynamic region tool to add a dynamic region. To activate the tool, click the **Dynamic Region** button in the toolbar.

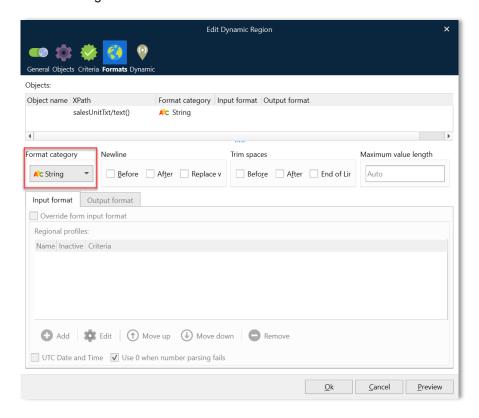


Once a dynamic region is added, you can use the **Edit Rearrange** and **Conditional Area** dialog boxes to specify the dynamic region properties.

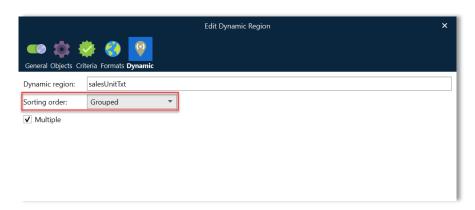


You can specify the data input type in the dynamic region properties. Data can be interpreted as follows:

- Number
- Currency
- Time
- Date
- String



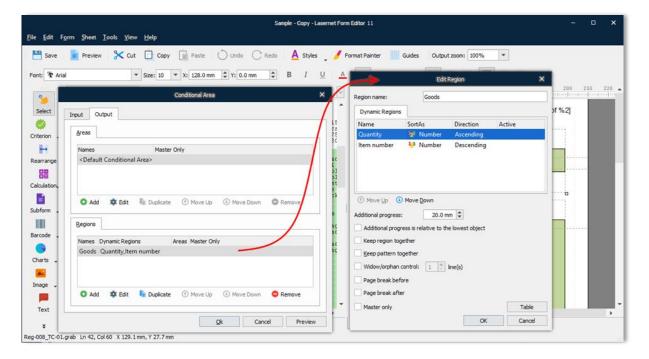
You can also specify the following dynamic region properties.





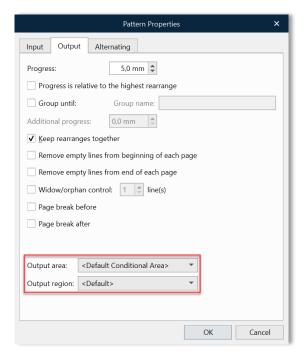
Dynamic Region Property	Description
Dynamic Region	Type a new criterion (dynamic region) name.
Sorting Order	 Arranges all available pattern instances in a defined order, within a region. Pattern instances are processed from top to bottom. First In First Out: Pattern instances have the same order in the output as the input. Grouped: Pattern instances are grouped by equal values in the input and then arranged in the output accordingly. Ascending: Available pattern instances are sorted in ascending order. Descending: Available pattern instances are sorted in descending order.
Multiple	If the checkbox is cleared, available pattern instances are considered as all one region. All data is grouped in one set but still arranged according to the specified sorting order. If the checkbox is selected, each available group of pattern instances is considered as standalone, and all available pattern instances are then arranged according to the specified sorting order.

More than one dynamic region object can be added to the region at a time. As a property of the conditional area, you can arrange dynamic region objects by moving each up or down. The top object is applied first, with each following object applied to the sorted data one by one until the end (bottom) of the list.





A dynamic region object can be added to the pattern where the **Output Region** value is set to **Same As Previous Pattern**.



In this case, the dynamic region is applied to the selected regions, in line with the current grab data, according to the pattern settings. If you choose another grab data file, it still comes into effect for the regions where it has already been applied in the first pass even if it does not correspond to the selected grab file/pattern settings anymore.



7.13 Merge Rearranges

You can merge several rearranges into one single object on the output pane. Press and hold Ctrl then either use the arrow keys to move a rearrange into another one, or drag and drop a rearrange into another one. Alternatively, press and hold Ctrl then select at least two rearranges, then right-click and click **Merge output**.

Note: Objects such as fixed text can be merged in the same way as rearranges.

All combined rearranges are shown in the objects list of the **Edit Rearrange** dialog. Each of the rearranges has its own definable font type, font size, formatting and color on the output page. This gives the user full flexibility in controlling how the contents of a rearrange field is presented on the final form.

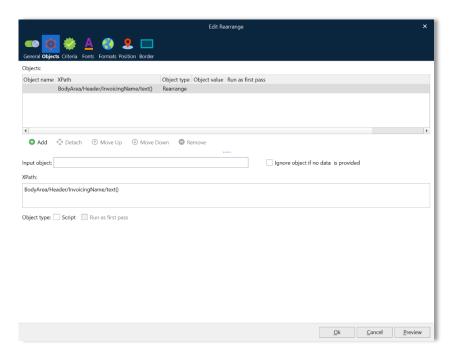
You can undo a merge of several rearranges by choosing **Detach All** from the context menu of a merged rearrange. Alternatively, you can select one or more input rearranges belonging to the same output rearrange in the input view and select **Detach** from the context menu. You can also select the rearrange(s) you want to detach and click **Detach** in the **Edit Rearrange** dialog.



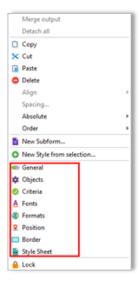
7.14 Edit Rearrange Properties

You can edit the properties of any rearrange by double-clicking it either in the input pane or output pane of Lasernet Form Editor. Alternatively, right-click it and choose the property you want to edit from the context menu.

The following image shows you the **Edit Rearrange** dialog.



The dialog is presented with several tabs. When calling a dialog by double-clicking the object, it opens with the **Objects** tab by default. Otherwise, it opens on the tab corresponding to the property you select in the context menu:





7.14.1 General Properties

Property	Description
Active	Toggles rearranges into active/inactive state. If a checkbox is selected, the rearrange is active and is normally processed. If the checkbox is cleared, the rearrange becomes inactive and, as a result, it is not processed or shown in the input or output. Note: Even if a rearrange is hidden and not shown in the output, it is still listed in the Pattern and Rearranges dialog which you can access via Sheet > Patterns and Rearranges.
Output object	The logical name of the rearrange on the output page and the combined contents for all values of the input objects assigned to the same rearrange. This name can be used for referencing the rearrange in a criterion assigned to the other absolute rearranges or to conditional rearranges belonging to the same pattern or even for JavaScripts.
Description	A descriptive representation of an object.
Master only	If selected, the rearrange is only applied to the Master sheet and not on the child sheets (sheets inherit data from a Master sheet).
Locked	Select the checkbox to prevent moving and resizing a rearrange.
XHTML	When selected, Lasernet assumes input as XHTML code and uses it to interpret the content of the document to display it in output. As a result, the Style Sheet tab becomes available in the Edit Rearrange dialog.

7.14.2 Object Properties

7.14.2 Object Propenies		
Property	Description	
Objects	Input rearranges can be combined into one single object on the output page.	
	Control	Description
	Add	Add a fixed text, current time, current date, current date and time, JobInfo, Page x of y or Script to the rearrange.
	Remove	Delete the current rearrange.
	Detach	Detach the selected input rearrange(s) and copy the output settings to the new rearrange(s), including position.
	Up/Down	Sort rearranges by moving them up or down.
Input object	A logical name can be assigned to a rearrange. This name can be used for referencing the rearrange in a criterion assigned to the same/other absolute rearranges or conditional rearranges belonging to the same pattern or even for JavaScript; rearrange in a criterion assigned to other absolute rearranges or conditional rearranges belonging to the same pattern.	
Position	Exact position of a rearrange on the input page defined by left/right columns and top/bottom rows (note : positioning can be carried out much faster by dragging-and-dropping). Selecting the Footer checkbox provides the possibility to position a rearrange in the footer of the input page; i.e. positioned relative to the end of the input conditional area. This is enabled by default when rearranges are created below a defined input conditional area and is only available for forms with text as input format.	



Script	JavaScript to be executed within the rearrange e.g., data conversion, text trimming or more advanced functions. Once the checkbox is selected, more Script controls become available.
Ignore object if no data is provided	If the checkbox is active and there is no data (defined XPath is not present in the input data or value is empty), the rearrange is not processed and shown neither in the output, nor in the input. If the checkbox is not selected (default value), the rearrange is processed with an empty value. Note: Even if a rearrange is hidden and not shown in the output, it is still listed in the Pattern and Rearranges dialog, which you can access via Sheet > Patterns and Rearranges.
Run as first pass	Has an effect on the event point execution time. By default the setting is turned off, which is the recommended setting in most scenarios, but by turning the setting on, you are able to accelerate execution time to run as the first pass in the processing of a form. The output result of the script will then be used when analyzing the number of pages and calculating text positioning on pages in the final form.

7.14.3 Criteria Properties

Property	Description
Criteria	Includes Objects, Schedule, and JobInfos. For details, see Add Criteria to Form Objects.
Instance Qualifiers	You can use the Instance(s) qualifiers option when you work with conditional rearranges. For details, see <i>Instance Qualifiers</i> .

7.14.4 Fonts Properties

Property	Description
Style name	Select to apply one of the predefined styles.
Formatting	Define font type, font size, color and formatting of the field on the output form.
Formatting Substitution	Shows a list of formatting substitution elements which you can include using the Add button. The rest of the command buttons allow you to manipulate the elements in the list: Edit , Move up , Move down , and Remove . For more details about formatting substitution elements, see <i>Criteria-based Text Formatting</i> .

7.14.5 Formats Properties

Property	Description
Format category	Select one or more regional profiles and specify other format parameters. When several regional profiles are added at a time, you can define which regional profile is applied by setting criteria based on the JobInfo and/or Input data values. If the criteria are true for several regional profiles in the list, the first of the regional profiles is used. If no regional profile is added, the regional profile which is set in the form/sheet options is applied. If the Override form input format checkbox is not selected, the format set for the form is then applied; if the Override sheet output format checkbox is not selected, default sheet-level take number one priority. If the Override sheet output format checkbox is selected, the local rearrange output format will take precedence. Both tabs become enabled when any value is selected from the Format category drop-down list, except String.



	Selecting the Override form input format checkbox enables, in its turn, the UTC Date and Time checkbox. Select the latter to define the format of input data as UTC date and time.
Newline	Choose to insert a new line before or after the rearrange text on the output form. The option of substituting line breaks with spaces is also available.
Trim Spaces	Trim spaces either before or after the rearrange text. In contrast to this, "Whitespace on edges" trims the output (see below).
Maximum value length	Specify a maximum number of characters to be included in the output. Linefeeds are counted as characters for strings that contains multiple lines.
Hyperlink	Allows you to create a hyperlink. For details, see <i>Turn Form Objects into Hyperlinks</i> .

7.14.6 Position Properties

Property	Description
Absolute	Defines on what page(s) the rearrange appears. Note: Rearranges in the output conditional area have no selected boxes since the page is automatically determined by Lasernet.
Position size type	This property supports the following settings: Auto XY, Auto X, Auto Y and Manual. If you choose the Auto XY the text box on the output page will be generated automatically depending on the font type and font size and Lasernet will not insert any line breaks. In Auto X mode it is possible to define a maximum height. If the input contains more lines than will fit, Lasernet will hide any lines that would overflow the height. Auto Y enables you to specify a width. Lasernet will add line breaks automatically to create as many rows as is needed. The Manual setting provides the ability to create a custom sized text box on the output page by defining a maximum height and width.
Position X/Y	The exact position of the rearrange text field on the output page. You can manually adjust the position by entering values in the fields.
Position Width / Height	The width and height of the text box on the output page. These values cannot be changed when Lasernet is set to automatically calculate them i.e. Auto X/Y/XY.
Rotation (degrees)	The rotation angle of the text box on the output page. You can set the value in degrees.
Rounding properties	Note: These properties are available only for rounded rectangles. Use Width and Height to specify the shape of the corner rounding. Use the Left / top, Left / bottom, Right / top, and Right / bottom checkboxes to choose which corners the rounding is applied to. Unselected corners become 90-degree angles.
Relative to	This property allows you to set the position of a rearrange (both absolute and conditional) relative to other entities such as a <i>conditional area or a region</i> or a group. The following options are available in the drop-down list: Current conditional area progress (for conditional rearranges only) – locates the selected rearrange depending on settings of the conditional area and the pattern to which it belongs. Checkboxes of the Absolute group box are disabled. It is the default option for conditional rearranges.



Top of page – locates the selected rearrange to the page top. It is a fixed position. Checkboxes for the **Absolute** group box are enabled. It is the default option for absolute rearranges. The **Y** position of rearrange is automatically set to 10 mm.

Top of cond. area – sets the rearrange position relative to the top rearrange available in the conditional area. Checkboxes of the **Absolute** group box are enabled. Once the option is selected, the **Conditional Area** field is available. The Y position of the rearrange is automatically set to -10 mm. You can adjust the distance between the selected rearrange and the top conditional area rearrange by modifying the Y setting of the selected rearrange.

Bottom of cond. area (Absolute) – sets the position of the rearrange relative to the last instance visible on the page and belonging to the current conditional area. Checkboxes for the Absolute group box are enabled. Once the option is selected, the Conditional Area field is available. The Y position of rearrange is automatically set to 10 mm. You can adjust the distance between the selected rearrange and the last instance of the conditional area rearrange by modifying the Y setting of the selected rearrange.

Bottom of cond. area (Last row) – sets the position of the rearrange relative to the last instance of the conditional area. Checkboxes of the Absolute group box are disabled. Once the option is selected, the Conditional Area field is available. The Y position of rearrange is automatically set to 10 mm.

End of cond. area (Absolute) – locates the rearrange relative to the end line of the conditional area on the selected absolute page(s). Checkboxes for the Absolute group box are enabled. Once the option is selected, the Conditional Area field is available. The Y position of rearrange is automatically set to 0 mm.

End of cond. area (Last row) – locates the rearrange relative to the end line of the conditional area. Checkboxes for the Absolute group box are disabled. Once the option is selected, the Conditional Area field is available. The Y position of rearrange is automatically set to 10 mm.

Top of region – sets the rearrange position relative to the top rearrange available in the region. Checkboxes for the Absolute group box are disabled. Once the option is selected, the Conditional Area and Region fields are available. In addition, the All pages checkbox appears. If the checkbox is selected, the rearrange is located relative to the top rearrange of the region on each page where the region is presented. The Y position of rearrange is automatically set to -5 mm.

Bottom of region – sets the rearrange position relative to the bottom rearrange available in the region. Checkboxes of the **Absolute** group box are disabled. Once the option is selected, the **Conditional Area** and **Region** fields are available. The **Y** position of rearrange is automatically set to 5 mm.

Top of group – sets the rearrange position relative to the top rearrange available in the group. Checkboxes for the **Absolute** group box are disabled. Once the option is selected, the **Conditional Area**, **Region** and **Group** fields



	are available. The Y position of rearrange is automatically set to -5 mm.
	Bottom of group – sets the rearrange position relative to the bottom rearrange available in the group. Checkboxes for the Absolute group box are disabled. Once the option is selected, the Conditional Area, Region and Group fields are available. The Y position of rearrange is automatically set to 5 mm.
	Hide output (for conditional rearranges only) – hides the rearrange from the output view. If all checkboxes in the Absolute group box are cleared for an absolute rearrange, the Relative to setting is changed to HIDDEN. Unhide by selecting absolute and it is disabled. To enable the Relative to setting, select at least one checkbox in the Absolute group box. If you locate conditional rearranges relative to a conditional area or a region, you do not have the option to specify these entities as these rearranges already belong to them. Otherwise, you are allowed specifying these entities for absolute rearranges. The group entity can be selected for both absolute and conditional rearranges as an entity relative to which you are going to locate rearranges.
	Hide if no output on page – selecting the checkbox allows hiding rearranges located relative to a conditional area in the output. The setting is useful if conditional data is distributed between several conditional areas. You can hide odd rearranges when data (patterns) within a conditional area in the output is not located on a page. The checkbox becomes available only if one of the following values are chosen from the Relative to drop-down list:
	Top of cond. area.
	Bottom of cond. area (Absolute).
	End of cond. area (Absolute).
Box vertical alignment	The vertical alignment of the text box on the output page relative to the X/Y position. You can choose between Top , Middle and Bottom .
Box horizontal alignment	The horizontal alignment of the text box on the output page relative to the X/Y position. You can choose between Left , Center and Right .
Text horizontal alignment	The horizontal alignment of the text within the text box. The text can be aligned as Left , Center , Right and Justified .
Text vertical alignment	The vertical alignment of the text within the text box. The text can be aligned as Top, Middle or Bottom.
Font Point Size	If Font Point Size is selected, the largest possible text between the minimum and maximum size will be applied. Note: This feature is supported for Rearranges and Conditional Rearranges with size type set to either Auto Y or Manual. Note: Processing time might increase slightly when the Font Point Size settings are applied. This setting only applies to individual objects. Merging objects will disable it. Whitespace on edges (Pad) options will be disabled if this setting is used. This setting overrides the font size in the toolbar
Font Width Scale	If Font Width Scale is selected, the optimal scale to fit the most text, between the minimum and maximum percentage values, will be applied.



	Note: This feature is supported for Rearranges and Conditional Rearranges with size type set to either Auto Y or Manual. Note: Processing time might increase slightly when the Font Width Scale settings are applied. This setting only applies to individual objects. Merging objects will disable it. Whitespace on edges (Pad) options will be disabled if this setting is used.
Line height	The line height can either be set as Absolute or Relative . In Absolute mode it is possible to define a specific line height in millimetres. In Relative mode the line height will be defined automatically based on the chosen font type and size.
Absolute empty line height	Enables you to define a specific line height in millimetre for empty lines. Select the checkbox and type in the height. Tip: Set this value to 0 to remove any empty lines and make the output compact.
Overflow	Specifies how instances are handled when letters do not fit within the rearrange box in the horizontal direction. This happens in Auto Y and Manual mode when a word is too long that it cannot fit alone on a line. Force Line Break cuts the word as late as possible and then inserts a new line with the rest of the word. Truncate cuts the word as late as possible and hides the rest of the word. Overflow (default) allows the word to continue outside of the box. In all cases outside overflow handling, the word is placed on a new line first to give it as much space as possible. Tip: Vertical overflow is handled by Auto XY/Auto Y (allowing any height) or Auto X/Manual (restricting height)
Keep rows together	When the checkbox is selected, Lasernet keeps all the lines of the selected column of rearranges for a pattern together on the same page. Note: The option is only available for conditional rearranges.
No word wrapping	When the checkbox is selected, Lasernet does not add line breaks at spaces, hyphens, etc. when formatting the text. This setting has no impact on Auto X and Auto XY modes since these do not add implicit line breaks. The actual appearance of the text in the rearrange, if Prevent implicit line breaks is checked, depends on what is selected in the Overflow control: • Force Line Break cuts the input line at the edge of the rearrange box and inserts as many new lines as required to fit the rest of the input line into the box. • Truncate cuts the input line at the edge of the rearrange box and hides the rest of the line.
	Overflow allows the input line to continue outside of the box.
Widow/orphan control	Overflow allows the input line to continue outside



Trim (default) removes all edge whitespace, shrinking the output rearrange box as much as possible.

Pad inserts one or more characters, usually periods or hyphens from the rearrange contents to the edge.

Keep makes sure that no whitespace is removed, making the output more accurately reflect the input.

Tip: This option retains whitespace introduced by automatic new-lines and can be useful when used in conjunction with background and border (see below). When merging several rearranges of the input to the same output line, use the trim setting (described above) to remove any extra spaces.

7.14.7 Border Properties

Property	Description
Background and border	These options make it is possible to add an optional background color or surrounding rectangle to the text. A margin can be specified (in millimetres) from the text to the edge of the rectangle. Note: When selecting, positioning, and resizing the rearrange, the normal (inner) box must be used rather than the surrounding (outer) margin. Note: When multiple rearranges with defined background colors overlap, the order in which they are layered is important. The last rearrange to be created is drawn on the top, hiding the rearrange below. The order can be changed by right clicking a rearrange and selecting an option from the Order submenu. In addition, it is possible to add a border to the selected rearrange. To do this, select the Border checkbox to activate the other controls. You are allowed setting border thickness, color, as well as show borders (Left, Top, Right, Bottom) by selecting the required checkboxes.

7.14.8 Style Sheet Properties

Use the **Style Sheet** tab to add CSS (Cascading Style Sheets) for the current XHTML rearrange using the internal way which stands for a <style> element.

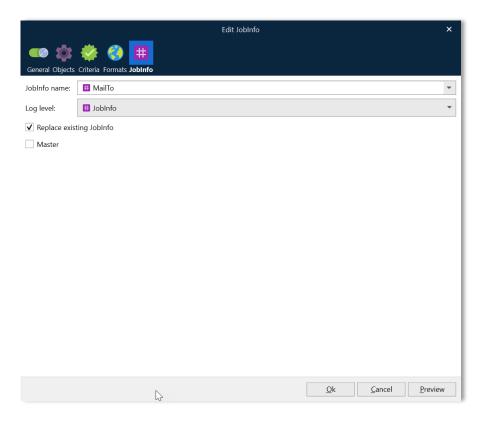
The style added here for the current XHTML rearrange overwrites the one defined for all XHTML rearranges on the Style Sheet tab of the Sheet Options dialog (for more information, see *Sheet Options*).

The style defined on this tab is overwritten by CSS added to HTML elements inline, if any.



7.15 Create a Jobinfo from Input Data

Activate the JobInfo tool and select an area in your input data file by clicking an element in the input data. The selected area will become highlighted in red, representing a rearrange.



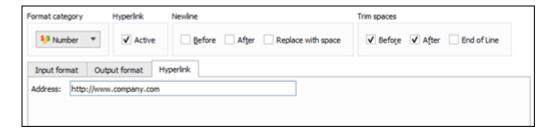
7.15.1 JobInfo Properties

Property	Description
JobInfo name	The name of the JobInfo when using it in scripts and in rearranges with the 'insert text' JobInfo type.
Log level	The category which events related to the JobInfo should be logged under. JobInfo: The events related to the JobInfo are logged under the JobInfo category. Debug: The events related to the JobInfo are logged under the Debug category. NoLog: The events related to the JobInfo are not logged.
Replace existing JobInfo	If selected, any other JobInfo with the same name is replaced.
Master	If selected, a JobInfo becomes available for the next sheets. The setting works the same way as the following script function does: masterJob.setJobInfo ("JobInfoName", "Value") The value of a Master JobInfo will not be present in the final output of a sheet, created by the Form Engine, if the JobInfo is included as an Insert Text ob



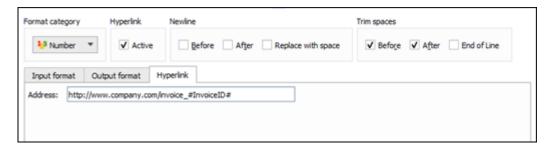
7.16 Turn Form Objects into Hyperlinks

Select the **Formats** tab to create a hyperlink. Once the **Active** checkbox is selected, the **Hyperlink** tab becomes enabled, and you can enter any URL into the **Address** field.



Note: This functionality is supported in PDF documents only.

You can insert a JobInfo as a part of the hyperlink to include a dynamic value as a part of the URL.

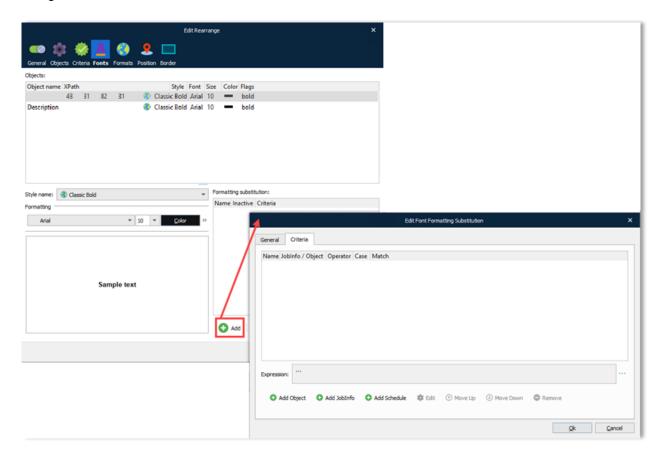




7.17 Criteria-based Text Formatting

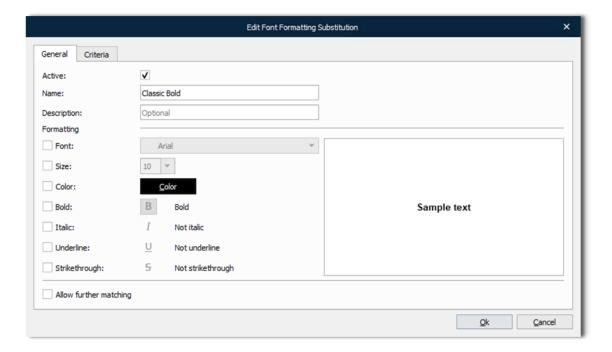
Use the **Formatting substitution** section on the **Fonts** tab of the **Edit Rearrange** dialog box to add one or more formatting substitution elements based on the specified criteria (objects, schedule, and/or JobInfos).

You can define and further manipulate criteria using the command buttons on the **Criteria** tab of the **Edit Font Formatting Substitution** dialog box.



Use the **General** tab controls to specify font settings for criterion/criteria you have defined. A font setting becomes available for editing when a corresponding font setting check box is selected.





The **Allow further matching** checkbox allows you to make the process of font formatting substitution more flexible. When you have more than one formatting substitution element in the **Formatting substitution** list, and those elements have certain criteria which are matched, the font substitution settings can be applied or ignored depending on the status of this checkbox. The topmost formatting substitution element that possesses matching criterion/criteria is processed and the specified font settings are applied. After this, if the **Allow further matching** checkbox is selected, then the next element which has matching criterion/criteria will be processed, and so on until the end of the list.



8 Preview the Output of a Sheet

To preview an output, proceed through the steps listed below:

- 1. On the toolbar, click Preview.
- 2. From the **Preview Options** dialog, specify the page(s) to be included to the output preview.
 - Current sheet: Select this radio button to include all the pages on the current sheet.
 - Page number: Select this radio button to include a specific page from the current sheet. Once selected, the Page text box is enabled allowing you to type the number of the page to be included.
 - Page range: Select this radio button to include a range of pages. Once selected, the Start page and End page text boxes are enabled, allowing you to specify your desired page range.

Note: If you have enabled page mixing for sheets or sheet combining, the preview output will be organized according to the sheet order and page numbering rules (for more details, see *Combining*).



9 Find Data and Form Objects

You can use the **Find** window to search for data and form objects in the Form Editor.

Form Editor provides the following capabilities:

- You can search in XML data displayed in Form Editor.
- You can search the objects that comprise the sheet design. This
 is a powerful feature that searches particular properties of form
 objects (such as a rearrange's XPATH or an object's
 Description), and searches for data in the form design that is
 displayed in the form design area. The data displayed there
 comes from the selected grab data tab.

9.1.1 Find Data in Input

To search for data:

- Press Ctrl+F.
- 2. In the **Find** window, click **Input** (to search the grab data).
- 3. In the **Find what** box, type the data that you want to search for.
- 4. Select appropriate search options.
- 5. Click OK.

Form Editor highlights the search results.

9.1.2 Find Objects in Output

You can search the objects in the form design. This feature searches properties of form objects (such as the object name and **Description**, and the **XPath** of rearranges) and searches the data that is currently presented in your form design; this data comes from the currently selected grab data tab.

The results of your search are presented as a list of form objects.

9.1.2.1 Search Form Objects

To search the objects in the form design:

- 1. Click in the form design area.
- 2. Press Ctrl+F.
- 3. In the Find window, click Objects.
- 4. In the **Find what** box, type the value that you want to search for.
- 5. Select appropriate search options.
- 6. Click OK.



Note: Form Editor searches the following types of objects:

- Rearrange
- Subform
- Barcode
- Charts
- Image
- Text
- Shape
- JobInfo

Form Editor searches the following properties of objects:

- General tab
 - Output object
 - o Description
- · Objects tab
 - Input object
 - XPath
 - Scripts

Additionally, Form Editor searches the data values that are currently presented in your form design (in the sheet design area).

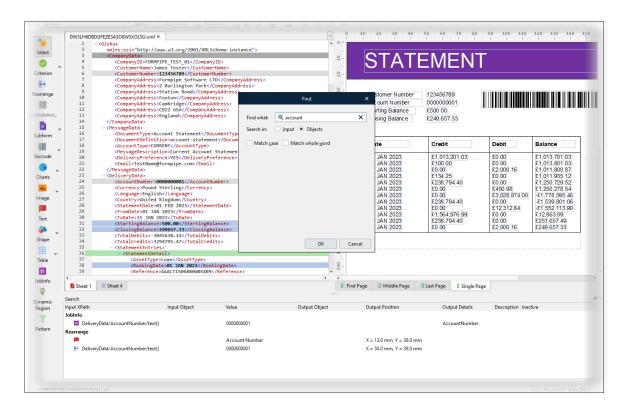
Form Editor also searches the following properties of Pattern objects:

- Pattern name
- Description
- Start pattern criterion



9.1.2.2 Navigate the Search Results

Form Editor displays the search results in a panel at the bottom of the Form Editor window.



The results of your search are presented as a list of form objects, grouped by type (for example, **Rearrange**, **Pattern**, and more). For each result, the list displays an icon that depicts the object type. Other columns of the search results table provide important properties of the object (such as its value, position in the form design, and description).

Click an item in the search results to view it in the page design. If it is not already visible there, Form Editor scrolls the page design to bring it into view.

Double-click an item to open it. For example, if you double-click a rearrange, the **Edit Rearrange** window opens.

Array Results

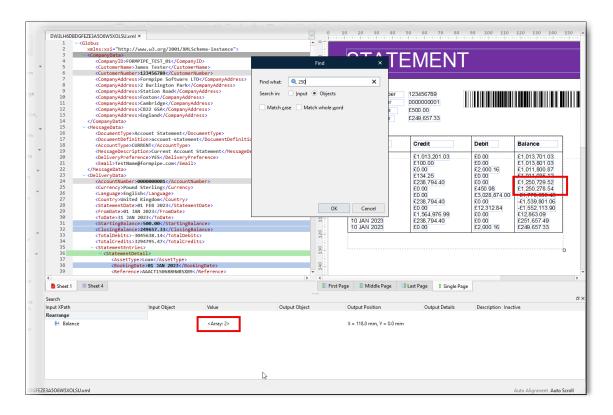
Some search results represent multiple form objects. Examples of this type of search result are:

- Conditional rearranges
- Merged rearranges



 Rearranges whose Edit Rearrange > Objects list contains multiple objects. For example, a rearrange might consist of a Script object followed by a Rearrange object.

These search result rows contain <array: [number of objects]> (for example, <array: 33>) in the appropriate column. The number corresponds to the number of items that match your search value. For example, if a conditional rearrange consists of 12 individual rearranges, but only 2 of those rearranges contain your search value, the row in the search results that corresponds to the conditional rearrange will contain <array: 2>.



Double-click <Array: [number of objects] > to "drill down" to the individual objects that it represents. To return to the search results, click .. (double period) at the top of the list.