
Configurable Documents

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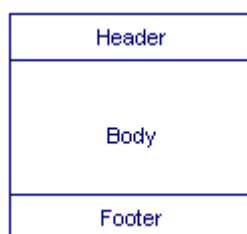
Contents

1	Configurable Documents	4
2	List of Configurable Documents	5
3	Creating a New Document	6
3.1	To create a new configurable document:	6
4	Defining the Content of the Document	9
4.1	Adding Formatting to a Document Field	11
4.2	FOP Formatting Instructions	12
4.3	Wrapping and Truncating Data in a Configurable Document	14
4.4	Nesting Configurable Document Forms	15
4.5	Combining Configurable Document Fields	17
4.5.1	To enter a calculation:	17
4.6	Displaying Dates in Full on Configurable Documents	18
4.6.1	To configure dates on the document:	18
4.7	Images on Configurable Documents	20
4.8	About colours in HTML and FOP	21
4.9	Conditional Formatting	22
5	Drag and Drop Designer	23
5.1	Defining Content using Drag and Drop	27
6	Importing and Exporting Configurable Documents	31
6.1	To export document definitions:	31
6.2	To import document definitions:	31

1 Configurable Documents

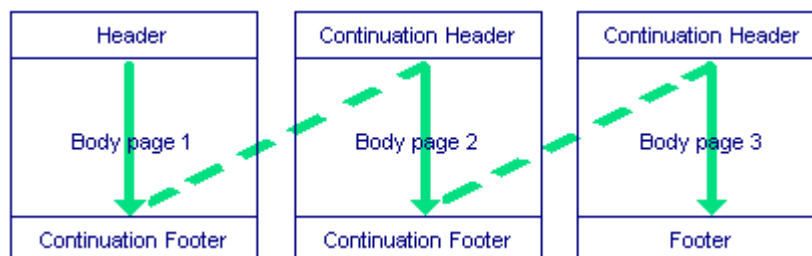
Because each COINS client has different requirements for the layout of documents such as statements or subcontractor certificates, COINS allows you to configure how these documents will be printed.

Configurable documents consist of a header, a body and a footer:



These are called forms. The body form of a document typically consists of a single line which is repeated; for example, a line showing the details of each invoice on a statement.

If the body runs to more than one page, the document needs continuation header and footer forms:



Note that continuation headers appear on all pages except the first, and continuation footers appear on all pages except the last; the header only appears on the first page, and the footer only appears on the last page. Continuation headers and footers can be different heights from headers and footers

For example, an invoice header might show the details of the supplier, delivery details, payment terms etc., while the continuation header might repeat only the invoice number and supplier name.

2 List of Configurable Documents

There is specific documentation available about the following configurable documents:

Commercial Manager	Variations	Payroll	Cheques and Payslips
Cash Book	Cheques and Remittances		P45 Documents
Contract Sales	Certificates		PR Documents
	Statements	Project Management	P60 Documents
	Applications		Meeting Minutes
	Valuation Payment Stage Print		RFI Documents
Facilities Management	FM Configurable Documents		Submittals
	FM Application/Invoice		Drawing Set Cover Sheets
	FM Application	Subcontract Ledger	Transmittal Cover Sheets
	FM Invoice		Daily Reports
	FM Task Print		Certificates
Human Resources	Accident Forms		Cheques and Remittances
House Sales	Quotations		Statements of Deduction
	Extras/Options Print		SC Self-Billing Agreement
	HS Receipts		Isle of Man C11
	Statements		Isle of Man C11A
Purchase Ledger	Cheques and Remittances		Isle of Man C14/C37
Procurement	Purchase Orders	VAT	Isle of Man C20
	Requisitions		Irish RCTDC Documents
			How To Configure Dual-Currency VAT Invoices

3 Creating a New Document

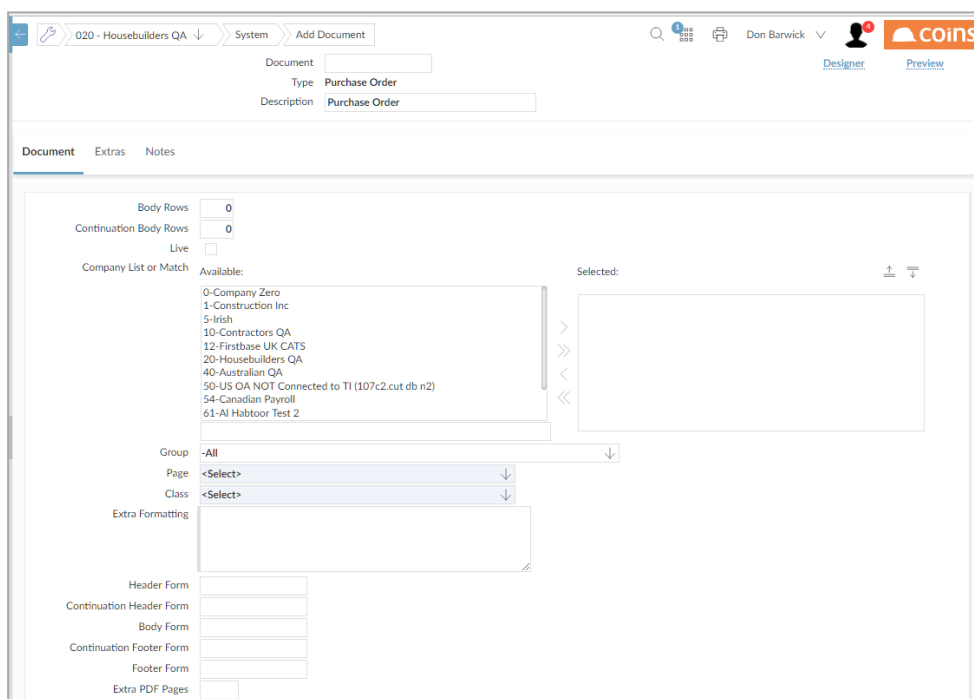
You may find it easier to copy an existing document and modify it, but if you want to create a new one, this is how to do it:

3.1 To create a new configurable document:

1. Go to **Document Designer**.
2. Select the document type for the document you want to create, and click



It is important to set this to the correct document type first, as document types determine which forms COINS offers a user when printing a document. Some document types may have additional features, such as more than one type of repeating line.

The screenshot shows the 'Add Document' window in the COINS Document Designer. At the top, there's a breadcrumb trail: '020 - Housebuilders QA > System > Add Document'. The 'Document' field is empty, while 'Type' and 'Description' are both set to 'Purchase Order'. Below this, there are tabs for 'Document', 'Extras', and 'Notes'. The 'Document' tab is active, showing settings for 'Body Rows' (0), 'Continuation Body Rows' (0), and a 'Live' checkbox. A 'Company List or Match' section contains an 'Available' list with items like '0-Company Zero', '1-Construction Inc', '5-Irish', '10-Contractors QA', '12-Firstbase UK CATS', '20-Housebuilders QA', '40-Australian QA', '50-US OA NOT Connected to T1 (107c2.cut db n2)', '54-Canadian Payroll', and '61-AI Halbtroor Test 2'. To the right of this list is a 'Selected' area. Below the company list, there are dropdown menus for 'Group' (set to '-All'), 'Page' (set to '<Select>'), and 'Class' (set to '<Select>'). An 'Extra Formatting' text area is also present. At the bottom, there are input fields for 'Header Form', 'Continuation Header Form', 'Body Form', 'Continuation Footer Form', 'Footer Form', and 'Extra PDF Pages'.

3. Give the document a code and a description. COINS uses the code to identify the document; the description is used when giving the user a choice of which document to print. You can have different documents for the same document type, to allow you to print using different layouts.

- Because continuation headers and footers can be different heights from headers and footers (typically first page headers could show more information than continuation headers), you need to specify the number of body (repeating) lines on first and continuation pages. The number of lines you can fit on the page will depend on the total heights specified for header and footer lines, and the height specified on the body lines.

Body Rows	<input type="text" value="12"/>
Continuation Body Rows	<input type="text" value="15"/>

- Choose a page layout for the document.
- Choose a default Class for the document. A Class is a combination of formatting features, such as font, size, colour and background
- Add Extra Formatting if required; as a minimum enter the text 'margin=0mm,padding=0mm' to account for differing FOP versions.

Page	<input type="text" value="%LETPORT-Letter Portrait"/>	↓
Class	<input type="text" value="%12PT-Standard 12pt"/>	↓
Extra Formatting	<input type="text" value="margin=0mm,padding=0mm"/>	

- For each form (header, continuation header, body, continuation footer, footer), give a name. You can call these whatever you like, but when you set up the fields to print on the document, you use these codes to specify which form they appear on. If you want the header and continuation header to be the same, give them the same names (similarly with the footer and continuation footer). Note that the form you nominate as the body form is used to specify the formatting (especially the line height) of blank lines at the end of the repeating body data. Each document must have a form called BODY.
- Many documents use other form names that are specific to the type of document. For example, Contract Sales statements use additional forms for certificate lines, invoice lines, CS cash lines and SL cash lines within the

body of the document. Enter your names for these on the Extras tab. See the side-frame help or the documentation for each module for more details.

10. Documents can be stored against tables. The tables available will depend upon the document type you selected. If this option is selected, when the document print file is generated, COINS creates separate PDFs for each relevant record in the table, and stores the PDF against that record.

Store Document Against ☒ Contract ☐ Service Order
☐ Development Plot File ☐ Subcontract Variations

11. If you do not want users to be able to select the document for printing (for example, while you are still designing it) clear the **Live** tick box.
12. Save the document.
13. Then add field records (see [Defining the Content of the Document](#)).

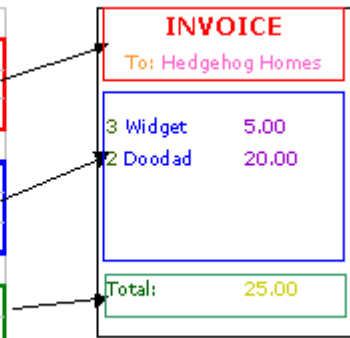
NOTE

As you configure the document, you can preview the layout. Click the Preview link in the header to display a two-page PDF that contains dummy values for all the fields, but allows you to view the general layout of the document.

4 Defining the Content of the Document

The information that is displayed on the document can be either the value of a database field or fixed text.

Form	Row	Col	Text	Field
HEAD	1	1	INVOICE	
HEAD	2	1	To:	
HEAD	2	2		rcm_name
BODY	1	1		ril_qty
BODY	1	2		ril_desc
BODY	1	3		ril_value
FOOT	1	1	Total:	
FOOT	1	2		rin_amount



Add a separate field record for each database field and each bit of text on the document.

	Form	Row	Col	Text	Field	Include Form	Border	Width	Height
<input type="checkbox"/>	HEAD	1	1	To:		<input type="checkbox"/>		10mm	10mm
<input type="checkbox"/>	HEAD	1	2		rcm_name	<input type="checkbox"/>		150mm	10mm

Anything that is to be printed on the same line must have the same row number.

The columns indicate the order of items in the row. Different rows can have a different number of columns, and the columns can be of different widths.

The **Text** field prints text on the form. You can embed database fields in the **Text** box by adding { } either side of the field.

The **Field** field allows you to reference fields in the database or add the path of an image, see *Images on Configurable Documents* in the online documentation.

The minimum height of a row is determined by the height of the first item on the row (other heights are ignored).

If you want column headings above the repeated (body) rows, include them at the bottom of the header section.

To show **page numbers**, use the tokens {page-number} and {page-count}. For example, enter a text record Page {page-number} of {page-count}.

If you want a logo to appear on the document, specify it on one of the Background fields of the Report Page Layout. The image will be aligned with the left-hand margin, so if you want the logo to be right-aligned, you need to add white space to the image itself.

4.1 Adding Formatting to a Document Field

If you want to add formatting to text on the document, to highlight it or separate it from other parts of the document, you can do this in various ways.

- To put a border round the text, click the **Border** tick box.
- To use a different font class, select it using the **Class** selector. A class is a combination of formatting features, such as font, size, colour and background.
- To override the formatting for the class, enter formatting instructions in the **Extra Formatting** field. For example:
 - background-color=grey will give the text a grey background.
 - font-weight=bold will display the text in bold.
 - font-family=Courier will display the text using the Courier font.
 - border-left-style=solid,border-right-style=solid,border-left-width=0.5pt,border-right-width=0.5pt will put a border of 0.5pt at the left and right of the text (for example, to show a vertical line between fields on a body row).
 - padding-left=1mm will add a gap of 1mm between the text and the left border.
 - Upper will display the text in upper case (****NOTE: This format is only used for Positive Pay documents**).

Enter combinations of formatting instructions separated by a comma. For example:

Extra Formatting

```
border-left-style=solid,border-right-style=solid,border-left-width=0.5pt,border-right-width=0.5pt
```

See [FOP Formatting Instructions](#) for more details.

4.2 FOP Formatting Instructions

Additional formatting for COINS configurable documents is based on the FOP (Formatting Objects Processor) standard. The full standard provides for a wide range of formatting options, many of which are not relevant to COINS configurable documents. You can read more about it at: <http://xml.apache.org/fop/>.

The following table shows some of the formatting instructions you are more likely to need.

Colour	<code>color=</code> <code><colour></code> <code>background-</code> <code>color=</code> <code><colour></code>	<code><colour></code> can be a colour name, like blue , or a red/green/blue code, like #55AC9B . See About Colours in HTML and FOP .	<code>color=cyan</code> <code>color=#00FFFF</code> <code>background-</code> <code>color=gold</code> <code>background-</code> <code>color=#FFD700</code>
Borders	<code>border=</code> <code><style></code> <code><colour></code> <code><measure></code> <code>border-left-</code> <code>color=</code> <code><colour></code> <code>border-left-</code> <code>style=<style></code> <code>border-left-</code> <code>width=</code> <code><measure></code> (Similarly - <code>right-</code> , <code>-top-</code> , - <code>bottom-</code>)	<code><style></code> the border style; only solid works <code><measure></code> is usually in points; for example; 1.5pt	<code>border=solid green</code> <code>1.5pt</code> <code>border-bottom-</code> <code>style=solid,border-</code> <code>bottom-color=red</code>

Typeface font-size= <measure> font-family= <family-name> font-variant= <variant>	<family-name> depends on the fonts installed on your system. By default, Helvetica, Times Roman, Courier, Dingbats and Symbol fonts are available. But it is possible to add any other licensed true-type font required (see How To Add Custom Fonts to FOP). <variant> can be normal or small-caps	font-family=Times Roman font-family=Helvetica, font-size=24pt font-variant=small-caps
Bold, italic, underline font-weight= <weight> font-style= <style>	<weight> can be normal or bold <style> can be normal or italic	font-weight=bold font-style=normal
text-decoration= <decoration>	<decoration> can be none , underline , overline or line-through	text-decoration=overline
Padding (gap between border and text) padding-left= <measure> (Similarly - right-, -top-, -bottom-)	<measure> - see above	padding-left=2pt, padding-top=1pt

4.3 Wrapping and Truncating Data in a Configurable Document

Normally, data will wrap within the width you set for the field, so that the "cell" will expand vertically and push the following lines down. So for example if you configure a company name field to display in an area, say, 25mm wide, you might get the following output for two different companies:

A company with a very long name	Short name
	The address
	The address

But you might want to ensure that the address line is always printed in the same place (to go on pre-printed stationery, for example, or simply to prevent the header from expanding and pushing the body and footer lines down).

To do this, you can truncate the display of the company name; If you add:

`overflow=hidden,wrap-option=no-wrap`

to the extra formatting of the field, there will be no wrap and the field contents will be truncated at the field width:

A company with a very long name	Short name
The address	The address

Unexpected wrapping is VERY BAD on documents that are split and sent to different recipients (e.g. payslips, remittances etc.) as it can throw out the page breaks which results in wrong document going to each recipient.

Please note that on BODY lines, COINS needs to keep track of the number of lines, so if you DO want a long description to wrap, use **View AsEditor** and enter a **Format** - for example: **x(25)** - to specify where you want to wrap.

4.4 Nesting Configurable Document Forms

You can include one form in another. This allows you to:

- Apply formatting (for example, borders and shading) to several fields together.
- Define blocks of fields that you can arrange relative to each other.
- Define blocks of fields or text that you can use more than once (for example, on both a header and a continuation header).

For example, if you want to show the contract name and address in different boxes, like this:

Contract: 1001 - Carlton Road - Gateshead	Address: Maintenance Compound Carlton Road Estate Gateshead Tyne & Wear
---	---

You could set up a form for the contract name, and a form for the address:

CONTADD	1	1	Address:	90mm	12pt	Arial8pt
CONTADD	2	1	job_shipaddr__1	90mm	12pt	Arial10pt
CONTADD	3	1	job_shipaddr__2	90mm	12pt	Arial10pt
CONTADD	4	1	job_shipaddr__3	90mm	12pt	Arial10pt
CONTADD	5	1	job_shipaddr__4	90mm	12pt	Arial10pt
CONTRACT	1	1	Contract:	95mm	12pt	Arial8pt
CONTRACT	2	1	job_num	25mm	10mm	Arial18pt
CONTRACT	2	2	-	5mm	10mm	Arial18pt
CONTRACT	2	3	job_name	65mm	10mm	Arial18pt

Then include them on a line in the HEAD form, adding a border and extra formatting (see [Adding Formatting to a Document Field](#)):

```
HEAD 5    1    CONTRACT ✓    100mm 25mm background-color=#aaaaaa,  
                                         padding=2mm  
HEAD 5    2                                     5mm   40mm  
HEAD 5    3    CONTADD ✓    90mm  40mm padding=2mm
```

(Note the second line, which defines a blank space between the two boxes.)

4.5 Combining Configurable Document Fields

You can append one data field to another, using a calculation. For example, you might want to print all the address fields on a single line, or print the contract number and contract name as if they were a single field.

4.5.1 To enter a calculation:

1. Add a new line.
2. Leave the **Field** field blank.
3. Enter the calculation in the **Calculation** field. Put a \$ before each part of a calculation that involves text strings; use the full table and fieldname.

For example:

`$a=jc_job.job_num; $b=" (" + jc_job.job_name + ")"; $a + b`
will display the contract number, followed by the contract name in brackets.

4.6 Displaying Dates in Full on Configurable Documents

Most date fields that are available on configurable documents display the date as numbers; for example, 21/11/08. If you need to display the dates as text (for example, as 21 November 2008) you can do this using the RO_monthName field.

4.6.1 To configure dates on the document:

You can use the field `co_config.RO_monthName^{field}|offset|style` to display a date in various formats, where:

offset a positive or negative number of months by which to offset the current
= month

style = **SHORT** displays the month in short form (Jan, Mar);

FULL displays the month in full (January, March);

MIXED displays short month plus the year (Mar 2008);

LONG displays the day, short month and year (27 Mar 2008);

LONGFULL displays the day, month in full and year (27 March 2008).

So to display the date from po_hdr.poh_odate as a date with the month in short form (21 Nov 2008), put the following in the **Field** field:

`co_config.RO_monthName^{po_hdr.poh_odate}|0|LONG`

To display the date using a format not covered above, use a calculation. The following calculations are useful:

dateString (string)	Converts a date string (such as from an input field or a database field) to an integer
day(a)	Returns the date in the month if 'a' is the integer value of a date.
year(a)	Returns the year (as a four-digit integer) if 'a' is the integer value of a date.

So if you want to display the month name followed by the date in the month, then the year (March 27, 2008), put the following in the **Calculation** field (remember to leave the **Field** field blank):

```
theDate=dateString("{po_hdr.poh_odate}");  
theDay=day(theDate);
```

```
$theMonth= co_config.RO_monthName^{po_hdr.poh_odate}|0|FULL;  
theYear=year(theDate);  
$theMonth + ' ' + theDay + ', ' + theYear;
```

NOTE

theDate holds the value of po_hdr.poh_date as an integer (for example, 21/11/08 is stored as 2454793).

theDay and **theYear** hold the day and the year (as integers) calculated from **theDate**.

theMonth holds the month name and year from poh_date; the **\$** at the start of the line means the line is a character 'calculation'.

theDate, **theDay**, **theMonth** and **theYear** are all user-defined variable names - you could use other names.

The final line appends **theMonth**, **theDay** and **theYear** (as a character string) with spaces between.

Note the sequence of brackets and quotation marks in the **dateString** calculation: (" { field } ")

4.7 Images on Configurable Documents

You may want to include images, such as a company logo, on the document.

To include an image called *filename.gif*:

1. In the **Field** field, enter:
 - **IMAGE^filename** (if the image file exists in the /images/ directory of the COINS installation).
 - **IMAGE^/relative-path/filename** (if the image exists in a different directory on the webserver; *relative-path* is the relative path on the webserver to the directory where the image is stored).

NOTES

1. The image files must be gif images, and the filenames of the image files must be in lowercase.
2. Do not add the .gif extension after **IMAGE^filename**

2. Specify the height and width of the image.
3. Select View As: **PICTURE**.

If you want an image that relates to the whole page of a document (for example: a watermark, or a logo that shows down the side of the page), set this up on the Report Page Layout used for the document.

4.8 About Colours in HTML and FOP

In HTML and FOP you can use either colour names or hexadecimal codes to identify colours.

Colour names are simply the usual names for colours, such as red, green, silver, brown. Other colour names include goldenrod and fuchsia. (There are several websites that list the colour names you can use; search for "HTML colour names". Some browsers may not support all the names.)

Hexadecimal codes are written using the format #aabbcc, where aa, bb and cc are hexadecimal (base 16; 0 to 255) values that represent the amount of red, green and blue in the colour. So for example:

- #00FF00 is pure green (0 red, 255 green, 0 blue)
- #808080 is a mid grey (128 red, 128 green, 128 blue)
- #310073 is a dark purple (49 red, 0 green, 115 blue)

This allows you to specify colours much more precisely than using the colour names. Many graphics programs allow you to select a colour from a palette, and will tell you what the hexadecimal code for that colour is.

The colours used on the standard **COINS OA** screens are:

- The predominant light blue is "#DCE4EE"
- The mid blue (used for example on column headers and the selection areas at the left of a browse) is "#6699CC"
- The dark blue (used in the title bar) is "#3A3F8C".
- White is "#FFFFFF" and black is "#000000".

4.9 Conditional Formatting

Fields can be printed on documents based on conditions set in the Build field.

Build: `sys003.buildVarValid^kco|40`

Fields can be conditionally printed based on the COINS Company you are printing from.

For example:

The following build would print the field when printing the document from COINS companies 001, 005 & 011. It would ignore the field if the document was printed in any other COINS company.

sys003.buildVarValid^kco|1,5,11

Fields can be conditionally printed based on the information contained within the record you are printing.

For example:

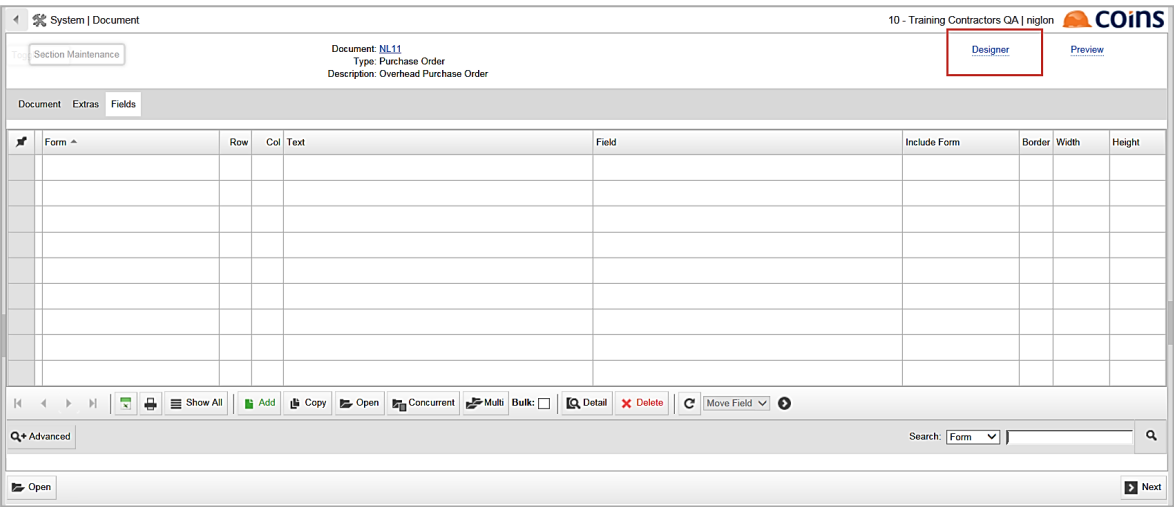
The following build would print the field when the record being selected to print is coded to General Ledger Sector 01. It would ignore the field if the record being printed related to any other Sector.

sys003.build^EQ||{gan_code}||01

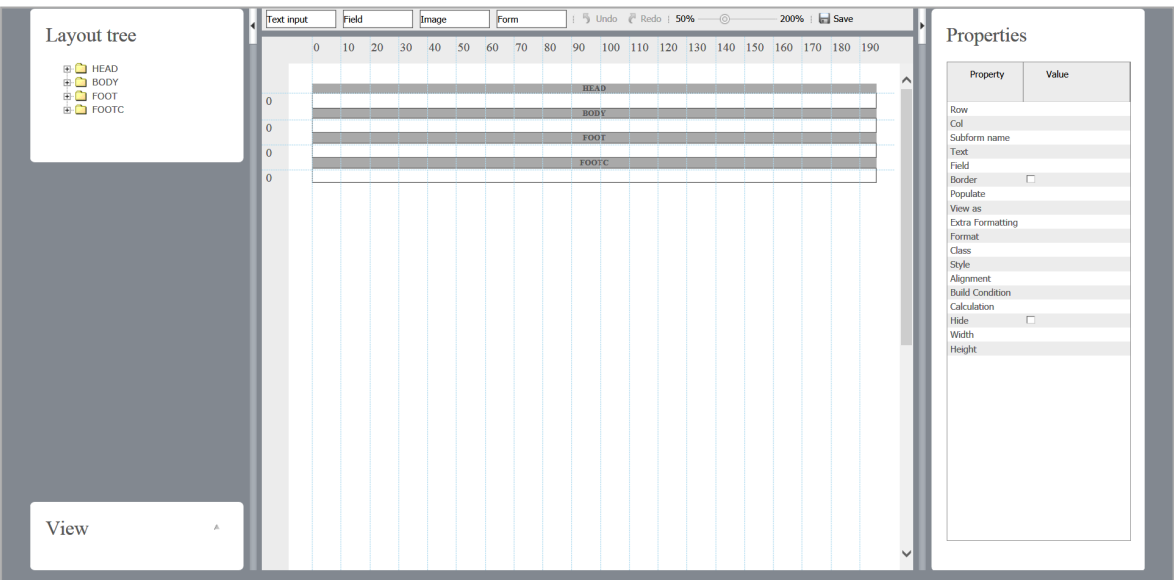
5 Drag and Drop Designer

COINS v11.02 introduced a drag and drop interface for defining the definition of fields on a Document.

Once the initial definition of the Document Type has been completed (3 - Creating a New Document), select the Designer Link at the top of the screen.



The drag and drop designer interface will be displayed.

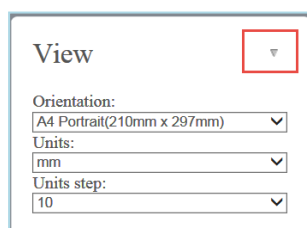


The interface window is split into three main sections.

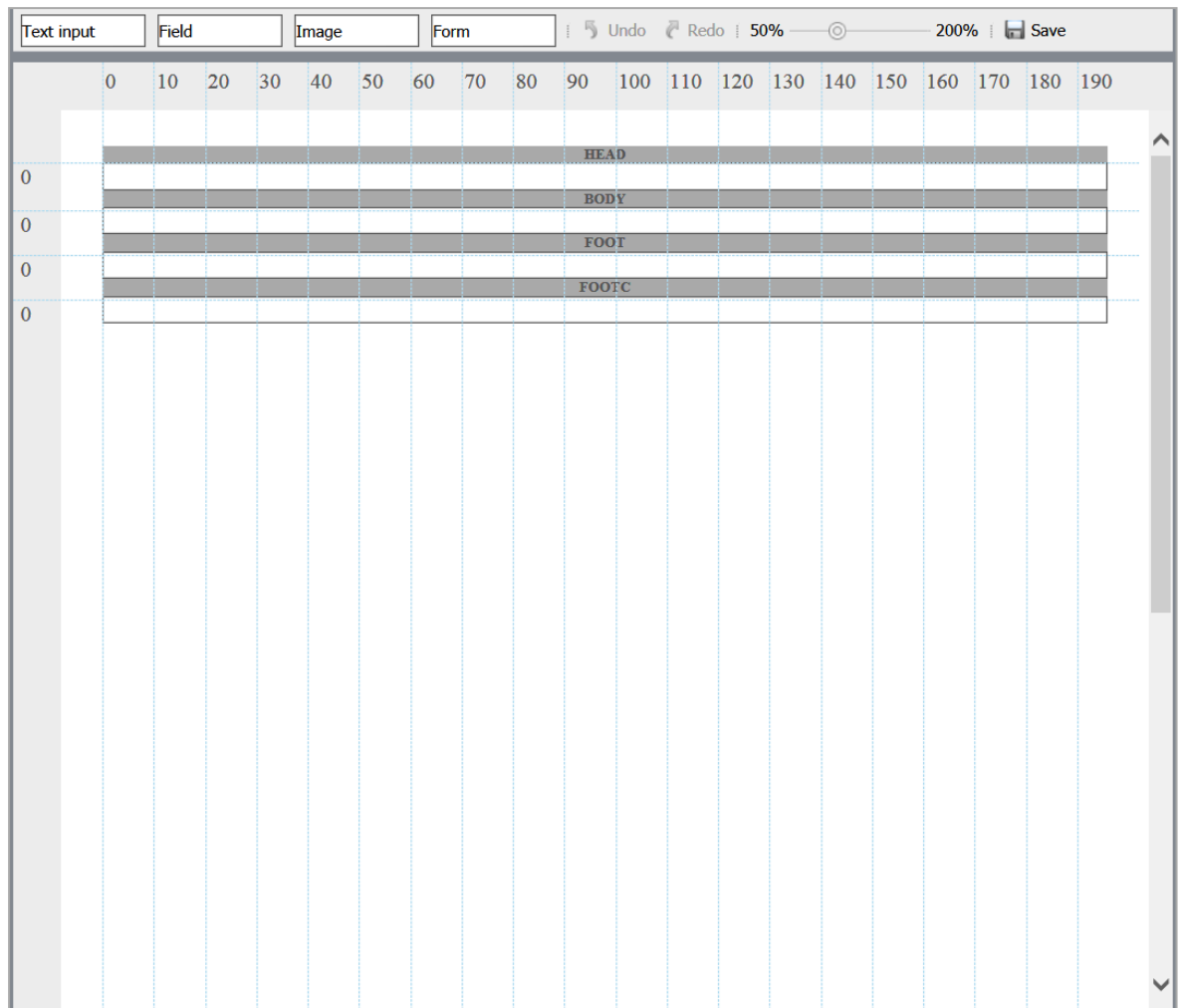


The left hand pane contains the Document Layout Properties, split between the Document Layout Tree, which shows the document sections and the View Properties panel.

The View Properties can be shown or hidden by clicking the Triangle icon on the top right hand side.



The central pane shows the main document canvas, also split into sections and rows.



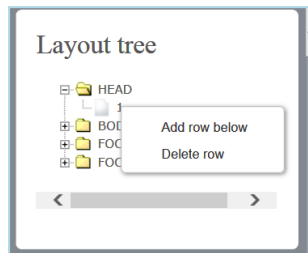
This is the area in which you will define the document content in a WYSIWYG format.

Properties

Property	Value
Row	
Col	
Subform name	
Text	
Field	
Border	<input type="checkbox"/>
Populate	
View as	
Extra Formatting	
Format	
Class	
Style	
Alignment	
Build Condition	
Calculation	
Hide	<input type="checkbox"/>
Width	
Height	

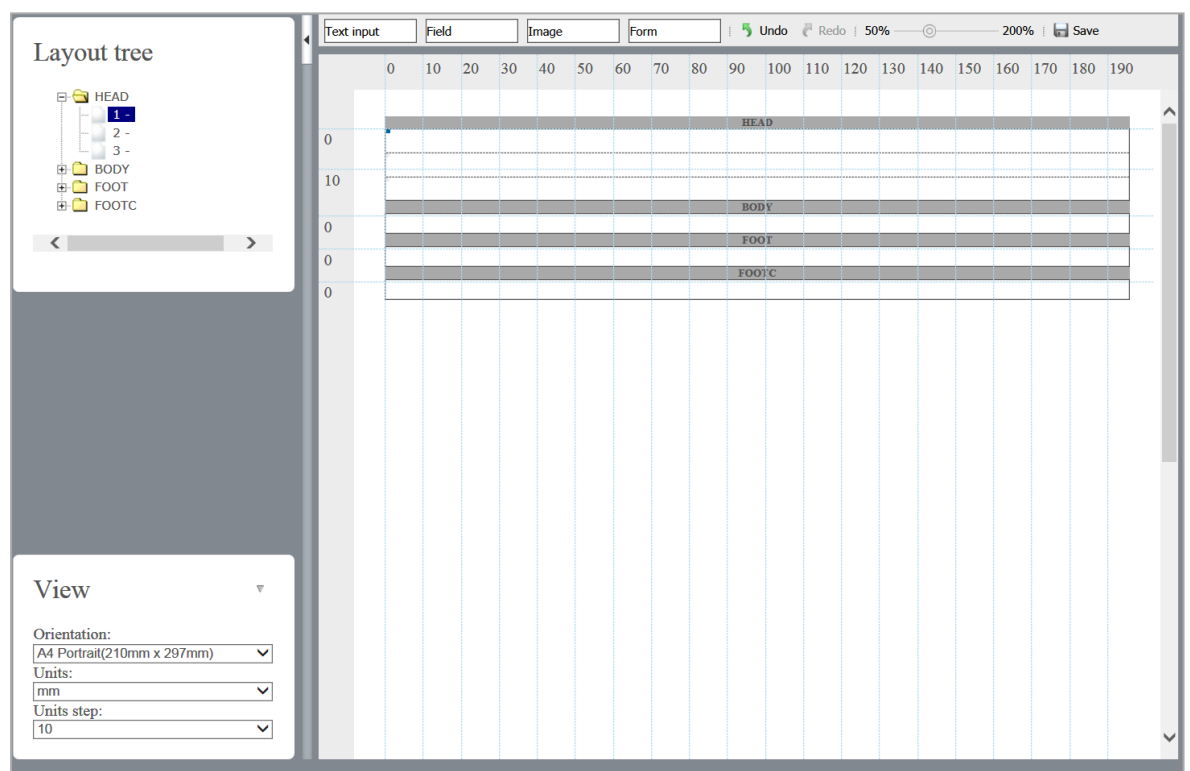
The third pane is the properties panel. When a field is selected, this panel will give access to most of the properties that would be available when defining a field through manual entry as detailed previously in this documentation.

5.1 Defining Content using Drag and Drop

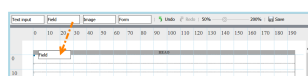


In the Layout Tree, expand the section to be worked on. Initially one row will be available in each section. Rows must exist before content can be added to them. Rows can be added or deleted by right clicking on an existing row to display the options menu.

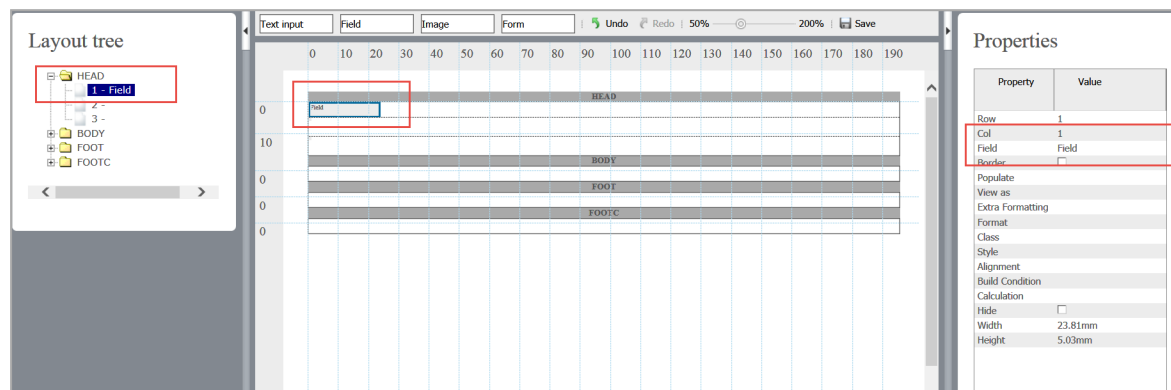
Create the number of rows required and these will appear in the Layout Tree and the Canvas.



Rows may contain text, database fields, images and Sub-Forms. All of which may be selected from the options at the top of the canvas and dragged into position.



With the element in place, the Layout Panel and Properties Panel will display the appropriate detail.



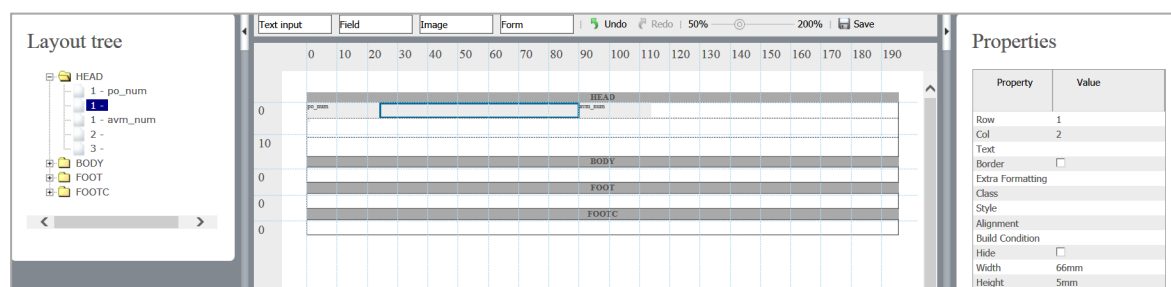
To set the properties of the selected element, use the properties panel to set up field names, formats and calculations etc. as required by double clicking on the item to change. Note that field names (eg. job_num) must be known before-hand as field lookup is not currently available in the Drag and Drop interface.

For simple changes to an element, double click on the field within the canvas to change its name or label. Widths and heights can also be changed in the canvas by dragging the borders of the field.

Continue to define your document as required.

To amend fields or view their properties, select the field in the Layout tree or double click the field on the canvas.

To add gaps between fields, add Text fields of an appropriate width and set the text field to blank.

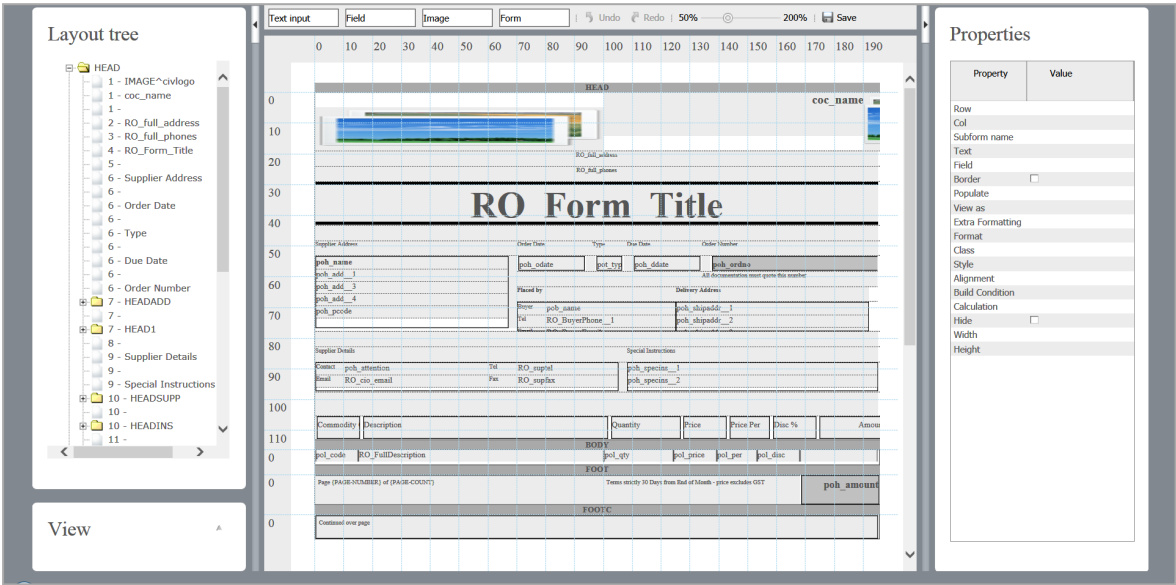


The Undo and Re-do buttons will only undo/re-do the last change you made to the design

Use the Save button at the top of the canvas periodically to save your work and commit the design to the Document Designer. Your work will be lost if you fail to do this.

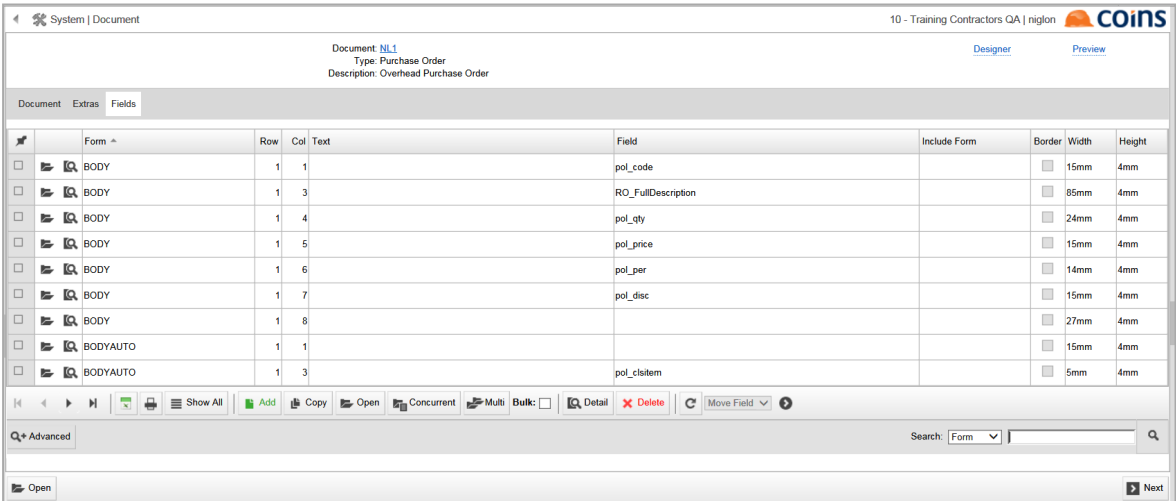


Once you have completed your design, as in the example below:



Ensure that you save before closing the interface window.

In Document Designer, all of the form design will appear in the fields tab for your form



You can now make any manual changes to the design or preview it using the Preview option at the top of the screen. You may return to the Drag and Drop interface at any time by clicking the Designer link at the top of the screen.

[illegible]

