



Fundamentals of DocOrigin Design

Lessons for the Beginner

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About This Guide

This guide is intended for users who are new to designing document layouts. It is a hands-on learning guide for DocOrigin Design that walks you through a series of exercises that provide some basic knowledge of the application. There are three (4) lessons to get you started:

1. **Navigating in DocOrigin Design** - provides an overview of the DocOrigin Design graphical user interface, and exercises for drawing and working with objects.
2. **Building a Static Layout** - gets you drawing your first document layout.
3. **Test a Document Layout** - explains how to test a document layout with sample data using the PDF Preview feature.
4. **Building a Dynamic Layout** - shows you how to create a simple dynamic layout.

In addition, there are two Quick References, which you can print and keep it at hand to assist you during the document layout process:

- **Basic Operations Quick Reference** – methods for achieving object-oriented tasks, such as selecting, moving, and sizing objects.
- **Shortcuts Quick Reference** – keyboard shortcuts for frequently used commands.

This guide assumes that the reader is experienced using Microsoft® Windows® applications, and as such, does not provide step-by-step instructions for achieving tasks common to Windows applications.

Terminology


The following terms are used in this guide:

| Term | Definition |
|-----------------|--|
| Boilerplate | The non-field, fixed objects on the document layout, including logos, text, lines, rectangles and circles. |
| Document | The output produced by DocOrigin Merge, processing one set of client data combined with a document layout. |
| Document Layout | An electronic representation of a form or document consisting of one or more pages, created using DocOrigin Design. Also referred to as "layout". |
| Dynamic Layout | A document layout that is constructed such that the objects may be in either fixed or non-fixed locations on the page(s). The objects or object groups in non-fixed locations are typically intended to allow for multiple occurrences of the associated data in the data stream. When the dynamic layout is combined with the data stream in DocOrigin Merge, the content of the data stream, that is, the number of occurrences of |

| Term | Definition |
|---------------|--|
| Static Layout | each non-fixed object group flows down page(s), generating output that uses as many pages as necessary to satisfy the data. A document layout that is constructed such that the objects are in fixed locations on the page(s). The locations are set in DocOrigin Design and cannot be altered by DocOrigin Merge processing. |
| Field | Object on the document layout that is a placeholder designating where the client data will appear. |
| Object | The graphical, text, field, table and other elements used to create a document layout. |
| Page | A drawing surface upon which objects are placed. A document layout may consist of one or more pages; each page may be set to the appropriate size, orientation and other characteristics to meet the needs of the document. |
| Property | A characteristic of a document layout or object. |

Conventions

The following conventions are used to enhance the readability of this guide:

| Convention | Usage |
|---|--|
| Bold Font | Denotes menu names, menu commands, and in a dialog box, tab names, section names and control names. |
| Monospace Font | Denotes a section of code or programming example. |
| MenuName > Command | Specifies the use of a menu command by menu and command name. |
| Key+Key | Specifies a mouse and/or keyboard combination, for example, CTRL+B. Typically, you press and hold the first key, then press or click the second key, and then release both keys. |
|  | Denotes additional information, typically a shortcut for performing an action. |

Lesson 1: Learn to Draw

DocOrigin Design is a typical interactive Microsoft® Windows®-based application with specialized tools for drawing document layouts. Another DocOrigin application, DocOrigin Merge, combines the document layouts created by DocOrigin Design with user-supplied data to produce high-quality documents.

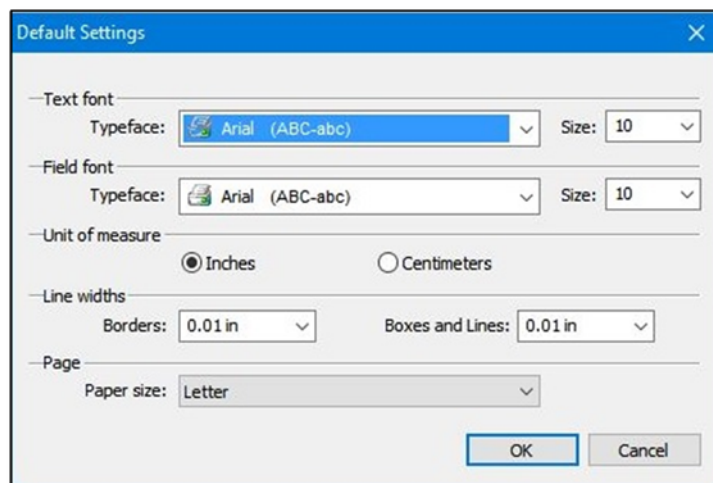
With DocOrigin Design, you can create document layouts for simple one page static (fixed) documents or dynamic layouts that will produce documents with many sections or repeating detail lines that can, depending on the client data, span multiple pages. Document layouts define:

- the fixed or static objects, called "boilerplate", such as titles, logos, lines, boxes and so on
- the location and formatting properties of variable data fields, that correspond with the values in the client data
- JavaScript™ (Mozilla® ECMA262) scripts, executed when DocOrigin Merge processes a job, that can be used to modify the data content or the appearance of the output
- the logic by which dynamic multi-page documents are created, such as where page breaks can occur, repeated header or footer information, and so on.

Exercise 1: The DocOrigin Design Window

In this exercise, you will become familiar with the DocOrigin Design window and its features.


1. Launch DocOrigin Design.
2. When you launch DocOrigin Design for the first time after installing, the Default Settings dialog appears in the application window.



This dialog enables you to preset some properties for commonly used objects and characteristics of the layout environment that will be used on every document layout.

Setting the appropriate defaults reduces the time required to complete a document layout, and provides consistency across all document layouts.

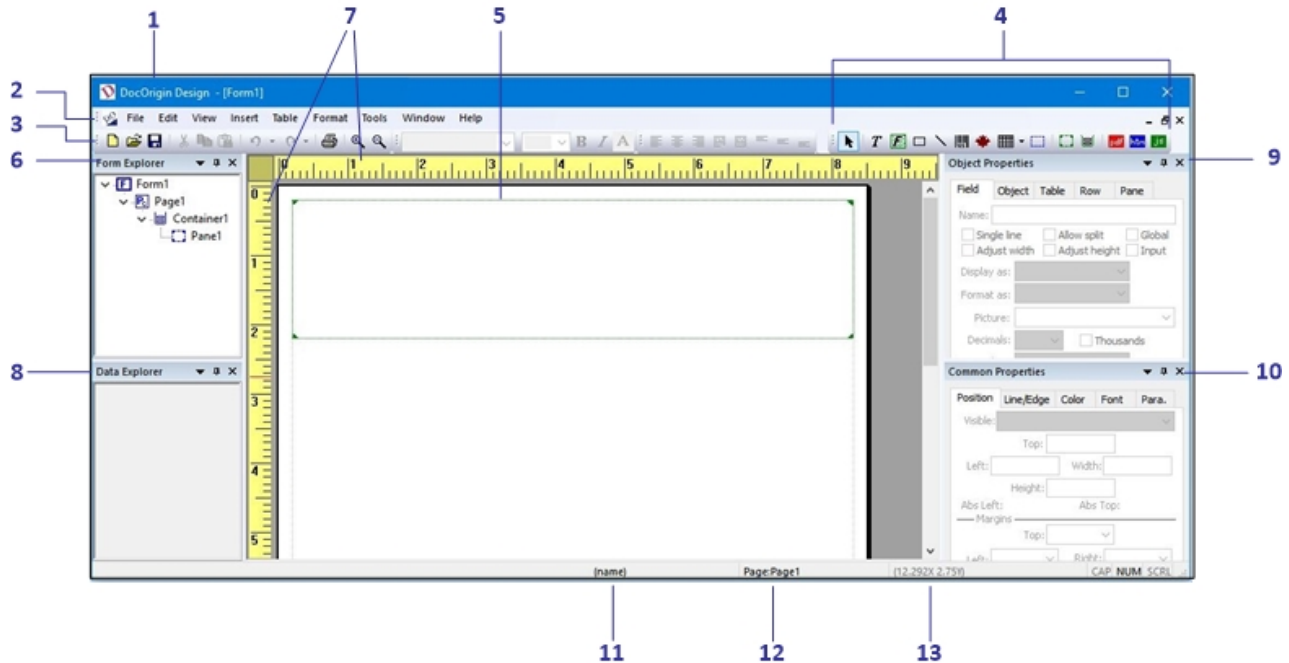
For this lesson, we will use the current settings, so click **Cancel**.

- To begin exploring DocOrigin Design, start a new document layout. Click **File > New** or click the **New icon**  on the Toolbar.


Now that a document layout is started, the features of the DocOrigin Design window are active.


- Take a few minutes to familiarize yourself with the application window.

The main features of the DocOrigin Design window are identified and described below.





- Title Bar** Document layout and configuration file names.
- Menu Bar** Menus and commands, many of which are common to Windows applications.
- Toolbar** Frequently used commands and the tools for drawing and managing the layout.
- Drawing Tools** Add objects to the layout, group objects, preview the layout, and add script:


 **Select** - select and deselect objects.


 **Table** - place a table of rows and columns.


 **Text** - place boilerplate or static text.


 **Group** - combine objects into a single unit.



 **Field** - set a placeholder for client data.


 **Pane** - a frame that holds a set of objects that may repeat or conditionally appear on the output.

 **Box** - draw rectangles and circles.


 **Container** - a frame that defines the margins of the layout area.

 **Line** - draw horizontal, vertical and diagonal lines.

  **Preview** - view the layout in its current state in PDF or HTML format.

 **Barcode** - place a barcode.

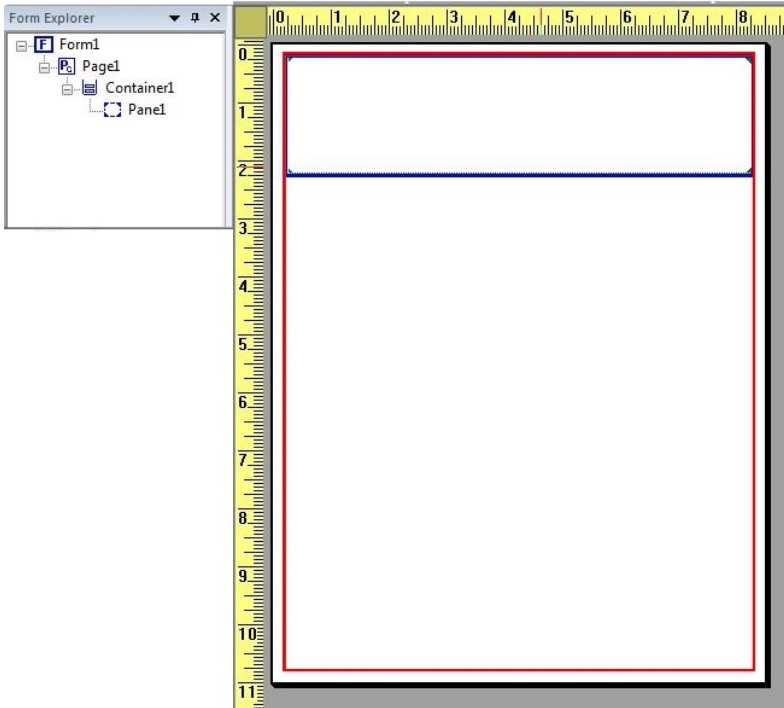
 **Script Editor** - launch the JavaScript editor.

 **Graphic Image** - place a static logo or graphic.

- 5 **Page** drawing surface containing the objects that comprise the document layout.
- 6 **Form Explorer** Hierarchical view of the layout and its objects.
- 7 **Rulers** Use to assist with object placement and sizing.
- 8 **Data Explorer** View a client data file intended for use with the layout.
- 9 **Object Properties** Tabs containing the characteristics, called properties, which are unique to a particular object.
- 10 **Common Properties** Tabs containing properties common to most objects.
- 11 **(name)** Name of the currently selected object.
- 12 **(page)** Name of the current page.
- 13 **(X,Y)** Horizontal and vertical coordinates that identify the cursor position on the layout, or the coordinates of the top left corner of a selected object.

5 Page and 6 Form Explorer Window

The page provides the drawing surface for your document layout and identifies the physical size and orientation of an output page of the document. A document layout can contain any number of pages of differing sizes and orientation. DocOrigin Merge will generate a document based on each page of the layout, its content including scripts, the client data, and a number of other conditions. By default, the DocOrigin Design page is set to Letter size (8.5" x 11") with Portrait orientation.



5. Look closely at the page.

There are two rectangles faintly outlined in this area. These are the container, outlined in the graphic in red, which is used to define the area where dynamic content will appear on the page. The pane, outlined in blue, defines a section of content for a dynamic layout. More details about these objects are provided in Lessons 2 and 4.

To the left of the layout area is the Form Explorer window. The Form Explorer provides a hierarchical view of the document layout and all of its objects.

At the highest levels in the hierarchy, the Form Explorer contains 4 objects, which DocOrigin Design provides by default on each new document layout:

- "Form1" identifies the document layout.
- "Page1" represents a drawing surface in the document layout and an output page in the document. A layout can have any number of pages.
- "Container1" as described above, is a rectangular object that identifies the top, bottom, left and right margins on the output.
- "Pane1" contains a set of objects that are a section for the document. There may be any number of pane objects in a container, and each pane may contain any number of objects.

6. To get a better look at the container, in the Form Explorer, click on "Container1".

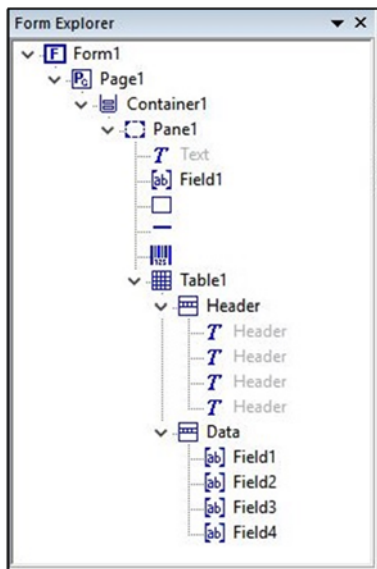
The object is "selected" in the layout area, with "handles" at its corners and sides. These handles enable you to size the container for aesthetic purposes and to ensure there is enough margin to allow for a device's unprintable area (a margin around the edges of the page where the output device cannot print).

7. Now, click on "Pane1" to select it.

This object appears at a level under "Container1" in the hierarchy, and as such, resides within the container. You can size this object, and insert any number of panes within a container.

8. Click in the margin of the page to drop the pane.

As objects, such as text, fields, boxes, lines, and so on, are added to a layout, each object is represented in the Form Explorer window, in the appropriate location in the hierarchy.



DocOrigin Design automatically assigns a default name to each document layout, and a unique name to each page, pane and field.

For text labels, DocOrigin Design uses "Text" for the default value in the text label on the page and for the object name in the Form Explorer, where the name appears in gray to indicate that it is content and not the object name. This also applies to the text labels for table headings, where the default value and name are "Header".

For tables, DocOrigin Design assigns a default name to each table and each row ("Header" and "Data"), and the cells for each data row ("Field1", "Field2" and so on).



Note that although there are two fields named "Field1" on the layout, the "Field1" in the table is in the hierarchy of "Table1.Data.Field1".

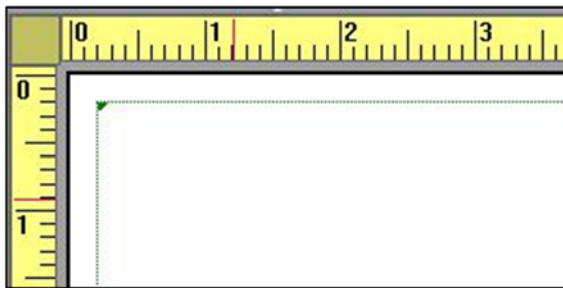
You can change any of the default object names, or assign names to unnamed objects. Assigning meaningful names to fields is especially useful for scripting purposes, and we recommend that field names use all capital letters for easy identification and reference. Note that object names can contain the following characters:

- a - z and A - Z
- 0 - 9
- : (colon) . (period) _ (underscore) - (dash)

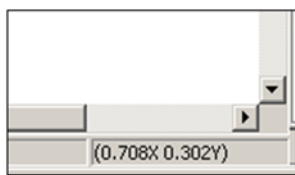
Within the Form Explorer, you can click on a page name to display that page or on an icon to select that object. You can drag-and-drop an object (and all its subordinate objects) to place it in another section of the hierarchy. You can collapse and expand the hierarchy.

7 Rulers and Grid and 13 X,Y Coordinates

Rulers and Grids assist in the drawing, sizing and placement of objects on the page. The Rulers are located along the top (horizontal) and left (vertical) sides of the page.



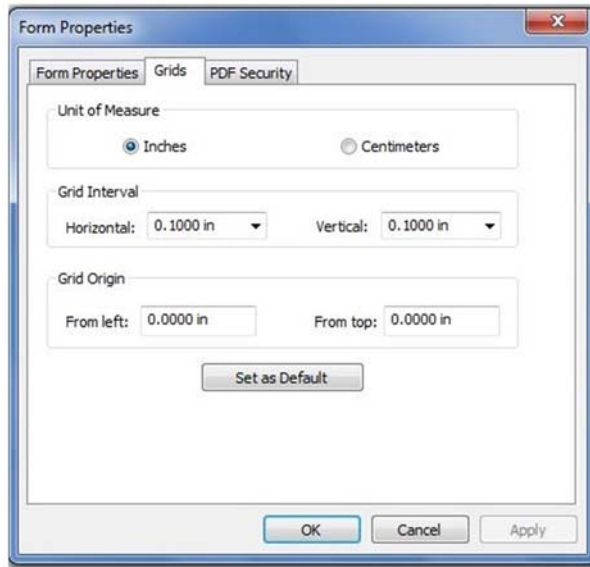
Notice the red line on each of the horizontal and vertical Rulers. These "positioning marks" indicate the position of the cursor point on the page when no object is selected. When you are working with an object, there are two positioning marks on each Ruler to indicate the position of the top left corner of the object, and the size of the object. These lines assist you in placing, moving and sizing objects.



The (X,Y) coordinates at the bottom right of the DocOrigin Design window show you the exact position of the cursor.

9. Move the cursor on the page and note that the positioning marks move with the motion, and the X,Y coordinates always reflect the current cursor position.

By default, the unit of measure for the Rulers is set to inches, and the increments are 1/10ths of an inch. You can change these settings using the **Grids** tab of the **Format > Form Properties** command. The dialog is shown on the next page.



The Grid is an invisible layer over the page, consisting of intersection points based on the increments on the Rulers. These intersection points enable you to precisely move, size and align objects, since objects move from one intersection point to the next. The increments, specified in the **Grid Interval** area, are decimal values, so for example, 8ths of an inch would be specified as 0.1250. You can set the increments independently for the horizontal and vertical Ruler.



You can click **Set as Default** to use your preferred **Unit of Measure** and **Grid Interval** values as the default for all new layouts.

You can choose to display or hide the Rulers by clicking **View > Ruler**. However, the Grid is always active, even when the Rulers are not displayed.

9 Object Properties Window

The tabs in the Object Properties window at the top right contain properties that are object-specific, and typically control the behavior of an object. The tabs in this window provide quick and easy access to the properties; the same properties are available in a dialog box accessible using the **Format > Object Properties** command.

The Object Properties window becomes active when you draw an object or select one or more objects. The available properties are determined by the objects selected.

10 Common Properties Window

The Common Properties tabs at the bottom right contain properties that are relevant to several objects, and which typically control an object's appearance. Like the Object Properties window, these tabs provide quick and easy access to the properties; the same properties are available in a dialog accessible using several of the **Format** commands: **Object Properties**, **Position**, **Line/Edge**, **Color**, **Font**, and **Paragraph**.

The window becomes active when you draw an object or select one or more objects. The available properties are determined by the objects selected.

Basic Operations Quick Reference

DocOrigin Design provides much of the functionality common to Windows applications in the context of a design and drawing application.

SET "SELECT" MODE

When you add an object on the layout, it's in a "selected" mode with "handles" at the corners and sides to indicate that the object is the current focus on the

layout.


Object is not selected.


Object is selected.

Likewise, intentionally selecting one or more objects activates those objects on the layout. Once objects are selected, you can move, size, align, set properties or otherwise modify the objects.

To select particular objects, first set select mode:

- Click the **Select** icon  on the Toolbar.

OR

- Click in the margin of the page.

SELECT ONE OBJECT

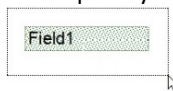
To select a single object on the layout:

- Point and click on one of the object's edges.



OR

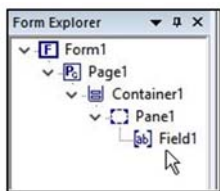
- "Lasso" the object. Hold the mouse button and drag the mouse over the object. Release the mouse button. Objects completely enclosed by the lasso



are selected.

OR


- In the Form Explorer, click the object.

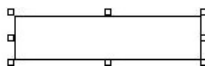


When objects are layered or in close proximity, it's often easiest to use the Form Explorer to select one or more objects.

SELECT TWO OR MORE OBJECTS

When more than one object is selected, like the two rectangles shown below, the handles are different to indicate which object is the last object selected. This is noteworthy for sizing or aligning objects.


Filled handles identify the last object selected.


Unfilled handles identify other selected objects.

To select more than one object on the layout:

- Lasso the objects to enclose all of the objects within the lasso. Note that only objects completely within the lasso are selected.

OR

- Point to each object and press CTRL + Click.

OR

In the Form Explorer:

- To select objects that are not listed consecutively, press CTRL, point and click on each object.
- To select consecutively listed objects, point to the first object, press SHIFT+Click. Then point to the last object, and press SHIFT+Click. The first, last, and all intervening objects are selected.

CHANGE THE LAST OBJECT SELECTED

When you select several objects, for example, using the lasso method, the last object selected (as indicated by the handles) may not be the appropriate object for the required operation. To change the last object selected within a group of selected objects, point to the object and press CTRL + Click.

DESELECT ONE OR MORE OBJECTS

"Deselecting" deactivates the objects on the page.

To deselect all selected objects:

- On the Toolbar, click the **Select** icon. 

OR



- Click in the margin of the layout area.

ZOOM IN & ZOOM OUT

DocOrigin Design supports the **Zoom** commands, typical to Windows applications. To zoom:

- Click **View > Zoom** and select the appropriate zoom level.

OR

- On the Toolbar, click **Zoom in**  or **Zoom out**. 

OR

- Use the CTRL+SCROLL WHEEL on your mouse.




Zoom In is useful when you use the Ruler to draw an object of a particular size, to place an object at a specific location, or to place objects that are in very close proximity.

Zoom Out is useful when you require a broader view of the layout area.

MOVE OBJECTS

To move one or more selected objects:

- Use the mouse on the layout:
 - Position the cursor on one of the objects to display the quad-arrow cursor. 
 - Use the object positioning marks (red lines) on the Rulers or the X,Y Coordinates, then drag and drop the objects at the appropriate location.

OR

- Click **Format > Nudge 1 grid unit** or use the keyboard shortcuts: UP, DOWN, LEFT and RIGHT arrow keys.

SIZE ONE OBJECT

To change the width and/or height of a selected object:

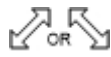
- Use the mouse on the layout:
 - Position the cursor on one of the handles on an edge of the object. The cursor displays an arrow that indicates the direction in which the object may be sized.



Adjust the height



Adjust the width



Adjust height and width

- Press and hold the mouse button, and drag the cursor in the direction to size the object.

OR

- In the Common Properties window: on the **Position** tab, set the appropriate values for **Width** or **Height**.

OR

- Click **Format > Nudge 1 grid unit** or use the keyboard shortcuts with the arrow keys: CTRL+UP (decrease height), CTRL+DOWN (increase height), CTRL+LEFT (narrow) and CTRL+RIGHT (widen).

SIZE MULTIPLE OBJECTS

To size two or more of the same selected objects:

- In the Common Properties window: on the **Position** tab, set the values for **Width** or **Height**.

OR

- Click **Format > Resize Objects** to set the width, height or both attributes to the dimensions of the last object selected.

OR

- Use CTRL+ARROW KEY: CTRL+UP (decrease height), CTRL+DOWN (increase height), CTRL+LEFT (narrow) and CTRL+RIGHT (widen).

COPY/PASTE AND DUPLICATE OBJECTS

You can speed up the document layout process by using the **Copy/Paste** and **Duplicate** commands.



Create the object and set the appropriate properties. Then copy/paste or duplicate it as many times as you require. You can also copy or duplicate several objects at a time.

To copy/paste one or more selected objects:

- Click **Edit > Copy** or **Edit > Paste**, or use CTRL+C and CTRL+V, respectively.

The copy is placed over the original object, and as such, is not immediately visible as a separate object. The copy is selected so you can move it to the desired location.

To duplicate one or more selected objects:

- Click **Insert > Duplicate** or use CTRL+ D, or ALT+CLICK.

The duplicate is offset from the original object, and is selected so you can move it to the desired location.

FIND AND REPLACE

The Find and Replace functions locate layout-specific objects, such as text strings in text labels or fields with particular names. To access Find/Replace:

- Click **Edit > Find**, **Edit > Find Next** or **Edit > Replace**, or use CTRL+F, F3 or CTRL+H, respectively.

DELETE OBJECTS

To remove one or more objects from the layout, select the objects, and click **Edit > Delete** or press DELETE.

Exercise 2: Working with Objects

In this exercise, you'll learn to draw various objects, and to move, size, copy, paste and duplicate objects. You'll practice each of these capabilities to familiarize yourself with the basics of the document layout process.

Before You Begin

- Note the location where DocOrigin is installed on your computer.
- You can print the **Basic Operations Quick Reference** and use it as you work through this exercise.
- As you proceed through this lesson, and practice adding objects to the document layout, you may want to clear the layout. To do so:
 1. Click **Edit > Select All** or press CTRL+A to select all the objects on the layout.
 2. Press the DELETE key.

Get Started




In this exercise, you're working with a static document layout. The objects on these layouts are in fixed positions, which correspond to their locations on the output page. When you launch DocOrigin Design, and click **File > New** to start a document layout, the default layout contains two objects that are used for dynamic document layouts. So to start a static layout, you'll remove these objects from the layout.

1. In the Form Explorer window, click "Container1".
2. Press the DELETE key.

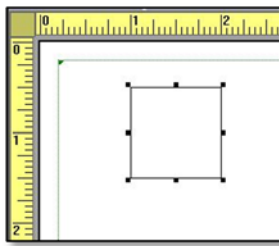
Both the "Container1" and "Pane1" objects are removed from the Form Explorer and the layout area. Now you are ready to get started.

Work with Fields and Geometric Objects

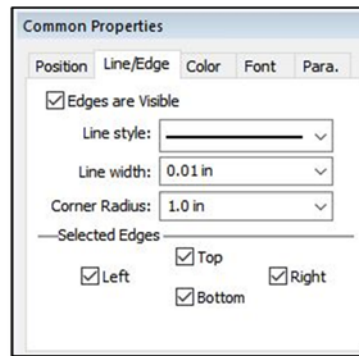
In this section, you'll learn to place and draw, fields, lines and rectangles and circles. To add an object to your document layout:

1. Click a Drawing Tool icon on the Toolbar, for fields,  lines,  and rectangles and circles. 
 - **Place Method:** To place an object of default size on the layout, position the cursor on the layout, and click.
- OR
- **Draw Method:** To draw an object of a desired size, position the cursor on the layout, and use a drag-and-drop gesture:

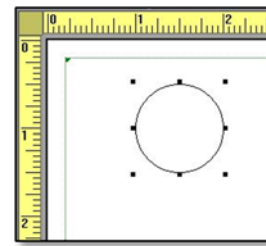
- For horizontal and vertical lines, position the cursor at one end point, and drag-and-drop in a straight line to the other end point.
- For diagonal lines, press the CTRL key, then drag-and-drop from one end point to the other in a diagonal direction.
- For fields and boxes, position the cursor at one corner, and drag-and-drop in a diagonal direction to the opposite corner, for example, from the top left corner to the bottom right corner.
- For circles, draw a square. Use the positioning marks on the Ruler to assist with sizing the object. In the Common Properties window, on the **Line/Edge** tab, set **Corner Radius** to 1.0 in.



Draw a Square



Set the Corner Radius to 1.0 in



Resulting Circle



To draw rectangles with rounded corners, draw a rectangle, and set the corner radius to one of the values that is less than 1.0.

Note that DocOrigin Design adds an entry into the Form Explorer for every object on the layout.

Practice

Use the **Basic Operations Quick Reference** for assistance with this practice, if necessary.

1. Add fields, lines, rectangles (with and without rounded corners) and circles to the document layout using both the place method and the draw method.
2. Practice selecting and deselecting objects, moving and sizing objects, and copying and duplicating objects.
3. Use the Form Explorer to assign unique names to the fields.
4. Before moving on to the next section, clear the page.

Work with Text Labels

Text is one of the key elements of a document layout. A text label may be a single word, such as "Name" or "Address", or may contain many paragraphs, for example, a set of "Terms and Conditions".

When you draw a text label, the object is set to "typing" mode, as indicated by the diagonal lines on the outline. As the graphic below shows, DocOrigin Design defaults the contents of a text label to "Text", which is highlighted, indicating the text is selected. When you move the cursor into the text label, the I-Beam cursor indicates that you are ready to type.



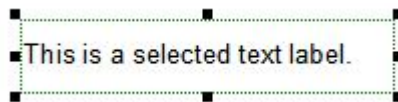
Text Label in Typing Mode

You can simply start typing in the text label to overwrite the word "Text". The typing function works in the same way as a standard word processing application, with automatic text wrapping and paragraphs. You can backspace to remove characters, or select, delete, or copy and paste text. As you type, the text label will increase in height to accommodate the amount of text entered.

In the Form Explorer, the first 30 characters of text are used to identify the text label. This enables you to easily select the appropriate text label should you need to make changes later.

When you want to switch from "typing" mode to "selected" mode, press **ESC** to toggle between the two modes. Selected mode for text labels enables you to move, size or align the object, or set its properties.

You will know that the object is in "selected" mode when the handles appear.



Text Label in Selected Mode



Practice

Use the **Basic Operations Quick Reference** to assist you with this practice.

1. Add text labels to the layout using the place and draw methods. Use the positioning marks on the Rulers and to draw a text label of a particular size.
2. Size a text label. Type several paragraphs of text to see the vertical space for the text label increase automatically, then resize the text label to rewrap the text.
3. Cut, copy and paste text from one text label to another.
4. Move and size a single selected text label and then do the same actions with several selected text labels.
5. Use the Find/Replace function to locate particular text labels.
6. Before moving on to the next section, clear the page.

Work with Images and Barcodes


Graphic images provide the capability to put any picture on the document layout, such as your company logo, graphs, charts and so on. With the barcodes function, DocOrigin Design offers many barcode formats, such as Standard or Interleaved 2 of 5, QRCode or postal mail formats.

To add a graphic  or barcode  to the layout, click the appropriate icon on the Toolbar and use either the place method or draw method to add the object. DocOrigin Design adds a placeholder to the layout for the graphic or barcode.

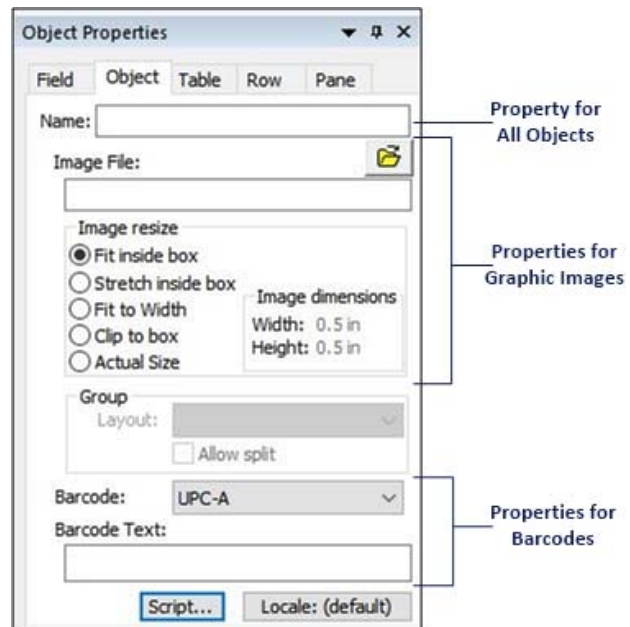
For a graphic, in the Object Properties window, you can assign a name to the object, and specify the graphic file that you want to use:

- Type the fully qualified name of the graphic file in the **Image File** box.

OR

- Click the **Browse** icon  to locate the desired file. To use one of the sample logos that accompany DocOrigin Design, navigate to the Images folder under the location where DocOrigin Design is installed, and select a file.

Note that in the **Image resize** area there are several options for fitting the graphic into the placeholder.



For a barcode, in the Object Properties window, you can assign a name to the object, select the format and optionally, specify a text string. Since a barcode is a type of field, when you do not provide a fixed text string, DocOrigin Merge will use the text in the client data designated for the barcode object.

Practice

Use the **Basic Operations Quick Reference** to assist you with this practice.

1. Add graphic and barcode objects to the layout using the place and draw methods.
2. Select, move and size one object and several objects. Use the positioning marks on the Rulers to position and size the objects.
3. Use the copy/paste and duplicate functions to replicate the objects.
4. Set the properties in the Object Properties window. For graphics, try the various resize options to see the effect on the image. For barcodes, enter a text string and set the various formats.

Save Your Work!

While it isn't necessary to save your practice page, it is important to remember to frequently save your work. Doing so will help you avoid situations where work is lost, such as during a power outage. DocOrigin Design provides the same methods of saving as other Windows applications: click the **Save** icon on the Toolbar, or click the **File > Save As** or **File > Save** command.

Plan the Document Layout - Static or Dynamic?

A document layout consists of one or more pages; for each page, you can specify the size, orientation, paper handling when the output is to a printer and a number of other properties. With DocOrigin, you can create layouts with either all fixed (static) content or all variable (dynamic) content, or a combination of both. You can determine the type of content the layout requires based on the document that you want to construct and the data that the document will contain.

When to Use a Static Layout

When you create a static layout for a document, all the objects on the layout are at fixed locations that relate directly to their location on the output page. Only the client data presented in the fields differs from one document to the next.

On a static document, the recipient may see areas on the document that are blank or inapplicable. For example, there may be a fixed number of multi-occurring data rows, as shown on the static invoice to the right. The invoice has 10 line items rows; the amount of space the line items will occupy is the same on every document generated, regardless of whether the data stream contains 1 line item or 10.

When the data stream contains more data than the layout can accommodate, DocOrigin Merge discards the excess data as there is no place for it on the page.

Static layouts are useful when you know exactly how much data the data stream will contain. They are easy to design as they can identically replicate paper forms.

Static Invoice Document with 4 Line Items

XYZ
Paper Products Inc.

Invoice No 10372
Invoice Date 04/26/2016
Purchase Order No 27262

INVOICE

Bill To
ABC Company
987 Main Street
Greenville, FL 12345

Ship To
ABC Company Warehouse 1
456 White Road, Unit 10
Greenville, FL 12345

| Item | Description | Qty | Unit Price | Extended Price |
|--------|----------------------------------|-----|------------|----------------|
| 26G392 | Copy Paper, Letter | 5 | \$55.00 | \$275.00 |
| 733331 | Bright White Laser Paper, Letter | 3 | \$50.00 | \$150.00 |
| 263870 | White Laser Address Labels | 2 | \$11.99 | \$23.98 |
| 629877 | Envelopes White Security | 4 | \$21.85 | \$87.40 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| | |
|------------------|----------|
| Subtotal | \$536.38 |
| Tax | \$53.64 |
| Total Amount Due | \$590.02 |

XYZ Paper Products 123 White Street Greenville, FL 12345-6789 xyzpaper.com

When to Use a Dynamic Layout

Dynamic documents provide ultimate flexibility to individualize each document to suit the data for a particular recipient. Document content can change by recipient, based on the data supplied, and the content of the layout (properties, scripting and so on).

Using the invoice example, with a dynamic layout, the space required for the multi-occurring data rows depends on how many line items are in the data stream. When there are a small number of line items, and sufficient space on the page, the next section will flow onto the page following the line items. When there are more line items than one page can hold, the detail lines will overflow onto a second and subsequent pages as required. Once all line items are output, DocOrigin Merge will generate any other sections that should appear on the document according to the specifications and data for those sections.

Dynamic layouts are adaptable and versatile, and useful in all situations, including replicating paper forms. These are some of the capabilities that dynamic layouts provide:

- A layout may have any number of pages containing static and/or dynamic content, with varying page sizes, margins, orientation, or headers/footers. This enables data to be targeted to a specific page or to allow for more usable space on overflow pages.
- Intelligent white space management facilitates filling unused space on a page with advertising, coupons, messaging, customized offers or notifications.
- Sections can be included or excluded, based on the data stream or certain values in the data.
- A table with a repeating data row enables processing of any amount of content in the data stream. The height of one or more table fields can change based on the length of the data.
- Fields that can increase in size means that a field taking in a large amount of text won't overflow.
- Paragraph alignment, for example, when there is a requirement for multiple languages on the document and the corresponding paragraphs must align.
- Summary information that can be output before or after DocOrigin Merge generates the documents for a data stream.

Dynamic Invoice Document with 4 Line Items

XYZ
Paper Products Inc.

Invoice No 10372
Invoice Date 04/26/2016
Purchase Order No 27262

INVOICE

Bill To
ABC Company
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Ship To
ABC Company Warehouse 1
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Greenville, FL 12345

| Item | Description | Qty | Unit Price | Extended Price |
|--------|----------------------------------|-----|------------|----------------|
| 28G392 | Copy Paper, Letter | 5 | \$55.00 | \$275.00 |
| 733331 | Bright White Laser Paper, Letter | 3 | \$50.00 | \$150.00 |
| 263870 | White Laser Address Labels | 2 | \$11.99 | \$23.98 |
| 629877 | Envelopes White Security | 4 | \$21.85 | \$87.40 |

| | |
|-------------------------|----------|
| Subtotal | \$536.38 |
| Tax | \$53.64 |
| Total Amount Due | \$590.02 |

Page 1 of 1

XYZ Paper Products 123 White Street Greenville, FL 12345-6789 xyzpaper.com

Lesson 2: Build a Static Document Layout

In this lesson, you'll build a simple static invoice layout, with a header, footer and a set of data rows for up to 10 line items. The layout you'll create is based on the document shown below.

| Item | Description | Qty | Unit Price | Extended Price |
|------|-------------|-----|------------|----------------|
| ITEM | DESC | QTY | UNIT_PRICE | EXT_PRICE |
| ITEM | DESC | QTY | UNIT_PRICE | EXT_PRICE |
| ITEM | DESC | QTY | UNIT_PRICE | EXT_PRICE |
| ITEM | DESC | QTY | UNIT_PRICE | EXT_PRICE |
| ITEM | DESC | QTY | UNIT_PRICE | EXT_PRICE |
| ITEM | DESC | QTY | UNIT_PRICE | EXT_PRICE |
| ITEM | DESC | QTY | UNIT_PRICE | EXT_PRICE |
| ITEM | DESC | QTY | UNIT_PRICE | EXT_PRICE |
| ITEM | DESC | QTY | UNIT_PRICE | EXT_PRICE |
| ITEM | DESC | QTY | UNIT_PRICE | EXT_PRICE |

| | | |
|------------------|--|-----------|
| Subtotal | | SUBTOTAL |
| Tax | | TAX |
| Total Amount Due | | TOTAL_DUE |


XYZ Paper Products 123 White Street Greenville, FL 12345.6789 xyzpaper.com

Before You Begin

- Note the location where DocOrigin is installed on your computer.
- The instructions provide exact vertical and horizontal placement of objects that enables you to practice using the Rulers and object positioning marks. The use of exact placement is common when replicating a paper form.
- As you proceed through this lesson, you will be instructed to save your work at regular intervals. This ensures that what you have done is available should you choose to stop before completing an exercise.
- You may want to print this page so that the invoice layout is readily available as a reference as you proceed through the layout process.

Exercise 1: Start a New Static Layout

To start a new static document layout:

1. Launch DocOrigin Design.
2. Click **File > New** or click the **New** icon  on the Toolbar.

For a static layout, the container and pane that DocOrigin Design automatically provides for a new layout are not required. To delete these objects:

3. In the Form Explorer, click on "Container1".
4. Press the DELETE key to remove both the pane and the container.

When you install DocOrigin Design, the default page size is set to Letter (8.5" x 11") and the orientation is Portrait. The Ruler and Grid increments default to 0.1000 inches, or 10ths of an inch. However, using a finer grid, such as 16ths of an inch, enables you to place objects more accurately on the page, and to better size objects. To change the grid to 16ths of an inch:

5. Click **Format > Form Properties**. Click the **Grids** tab.
6. In the **Grid Interval** area, change the **Horizontal** and **Vertical** values to "0.0625 in", and click **OK**.

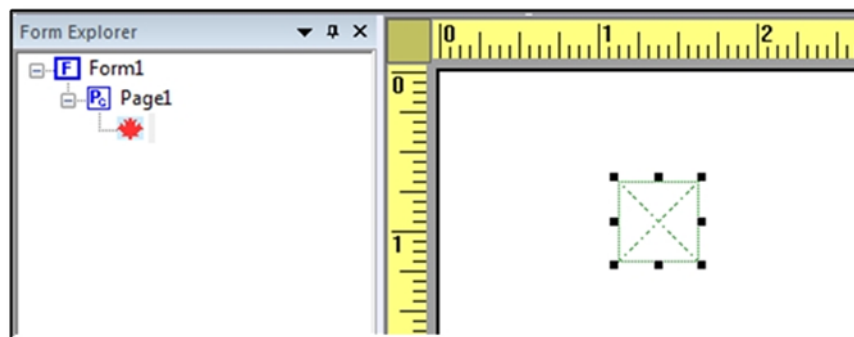
Note the change to the increments on the Rulers.

Place an Image File


You'll start by placing the logo:

1. Click the **Graphic Image** icon  on the Toolbar.
2. Place the cursor in the upper left of the layout area, and click.

A placeholder for the logo appears on the page, and in the Form Explorer, a logo icon is added to the hierarchy for "Page1".

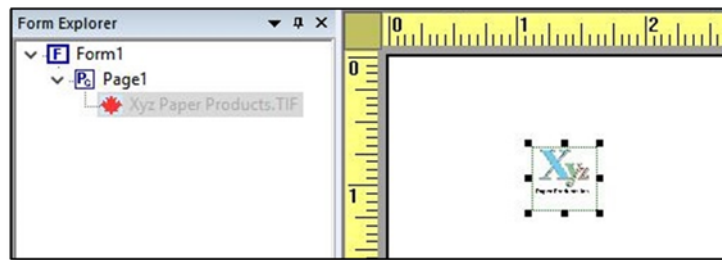
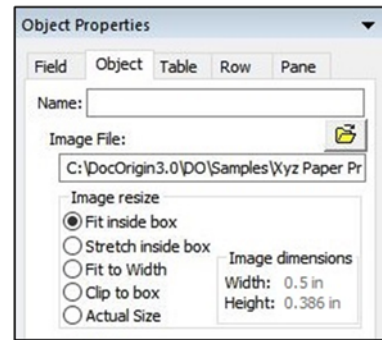


3. In the **Object Properties** window, click the **Object** tab.


4. In the **Image File** area, click the **Browse** icon. 

5. In the dialog, navigate to the location where DocOrigin Design is installed. Under ...\DO\Samples, open the file: XYZ Paper Products.tif.

The logo is inserted into the placeholder. In the Form Explorer, the file name appears beside the logo icon.



6. Using the object positioning lines on the Ruler, drag and drop the logo at the 0.75" increment on the horizontal and vertical Rulers.

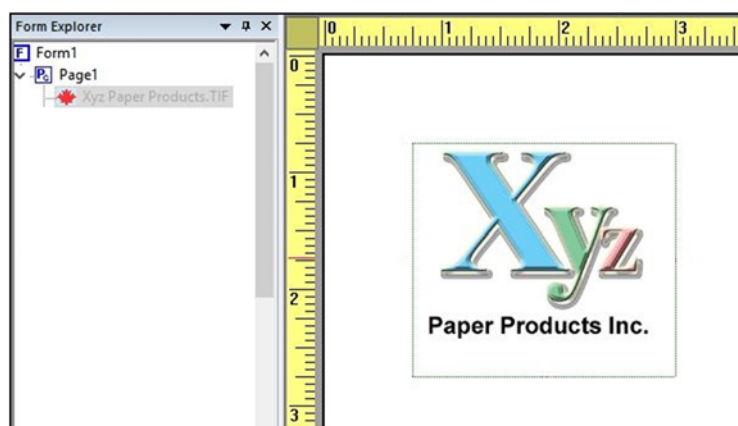
7. Size the logo, by dragging the cursor  diagonally down from the bottom-right corner. Release the mouse button when the bottom-right corner is at the 3.0" increment on the horizontal Ruler and the 2.75" increment on the vertical Ruler.



When you size a logo or graphic, DocOrigin Design maintains its aspect ratio (the ratio of the width to the height) to ensure the image does not become distorted.

8. Deselect the logo, and save your layout.

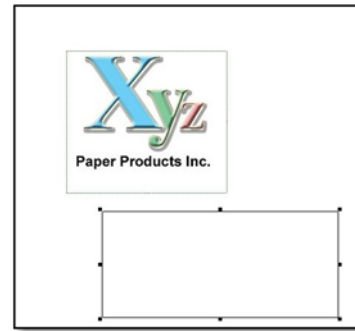
Your layout area should look like this.



Draw and Format Rectangles

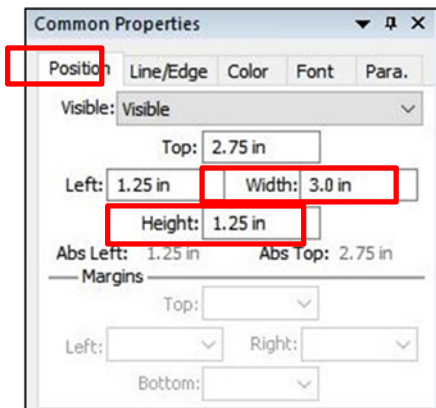
Now, you'll draw, position and format the rectangles for the Ship To and Bill To areas at the top of the document layout.

1. Below the logo, draw a rectangle of any size.

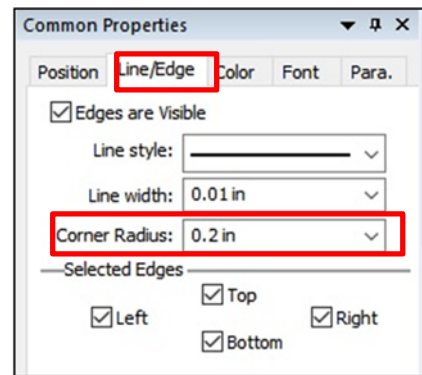


2. Use the tabs in the **Common Properties** window to size, round the corners, and shade the rectangle:

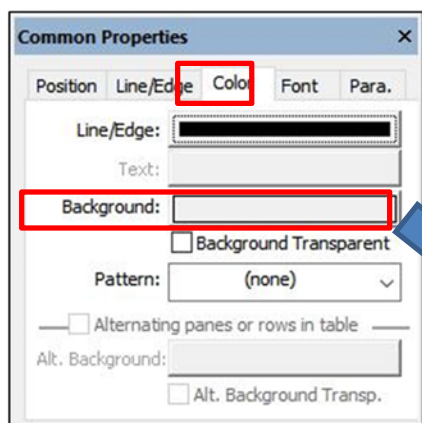
Position Tab



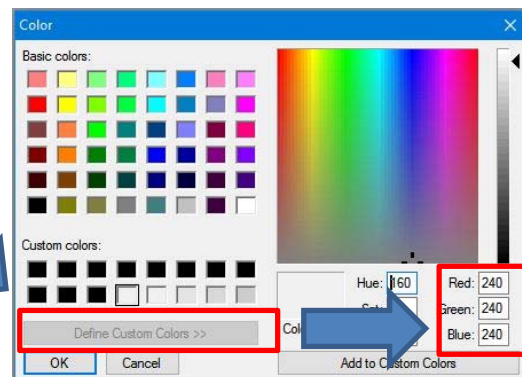
Line/Edge Tab



Color Tab

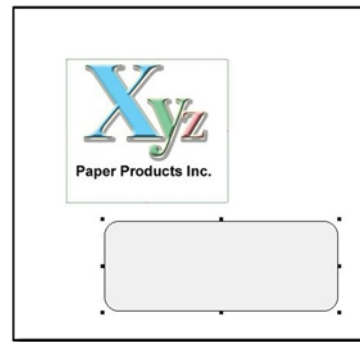


Define Custom Color Dialog

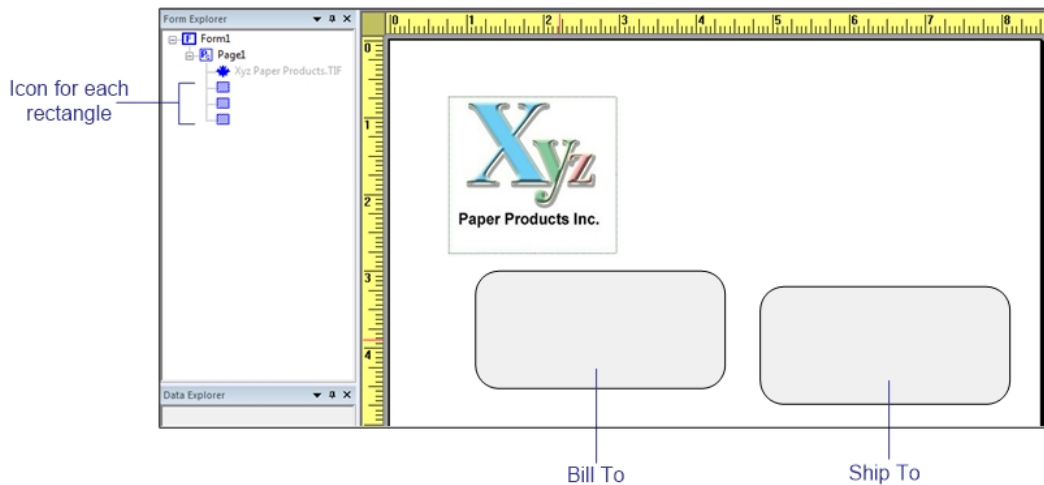


The rectangle should now look similar to this.

3. Duplicate the rectangle to create an area for the "Ship To" information and place it beside the first rectangle.
4. Deselect the rectangle.



5. Save the layout. Your layout should look similar to this:



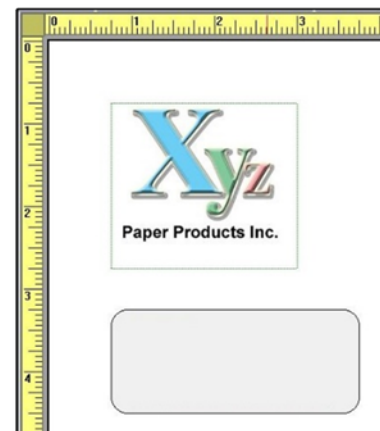
Align the Rectangles

To position the "Bill To" rectangle vertically and align it with the logo:

1. Select the "Bill To" rectangle.
2. Move the rectangle so that the top is at the 3.25" increment on the vertical Ruler.
3. Hold the CTRL key and select the logo. Both objects should be selected; ensure the logo is the last object selected.
4. Click **Format > Align to Object > Left**.
5. Deselect the objects.



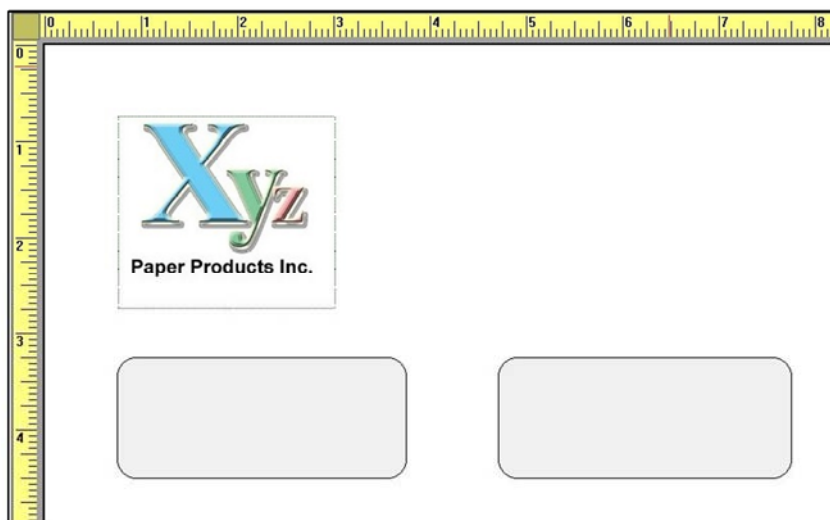
When you use the **Align to Object** commands, DocOrigin Design aligns the selected objects to the last object that you selected.



To position the "Ship To" rectangle:

1. Select the "Ship To" rectangle and position it at the 4.75" in. mark on the horizontal Ruler.
2. Select the "Bill To" rectangle.
3. Click **Format > Align to Object > Top**.
4. Deselect the objects, and save the layout.



After Positioning and Aligning the "Ship To"

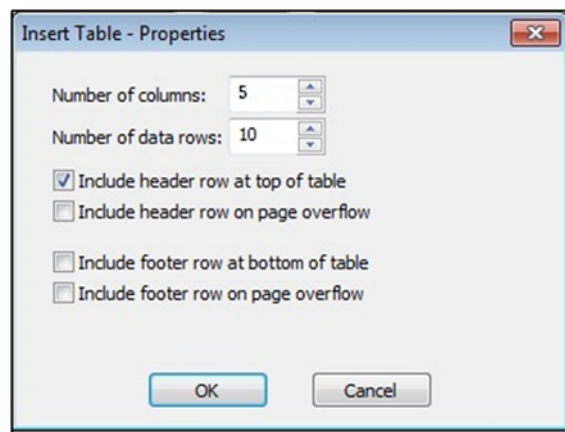


Add a Table

On a static document layout, a table provides an easy way to create rows and columns of data for the detail lines on a document, such as an invoice or a purchase order. Drawing the table establishes the physical area on the layout that the invoice details require.

To add a table to the layout:

1. Click the **Zoom Out**  icon on the Toolbar until you can see the entire layout.
2. Click the arrow beside the **Table** icon  on the Toolbar.
3. In the Insert Table - Properties dialog:
 - Set **Number of columns** to 5.
 - Set **Number of data rows** to 10.
 - Ensure **Include header row at top of table** is checked.
 - Uncheck **Include header row on page overflow**.
4. Click **OK**.



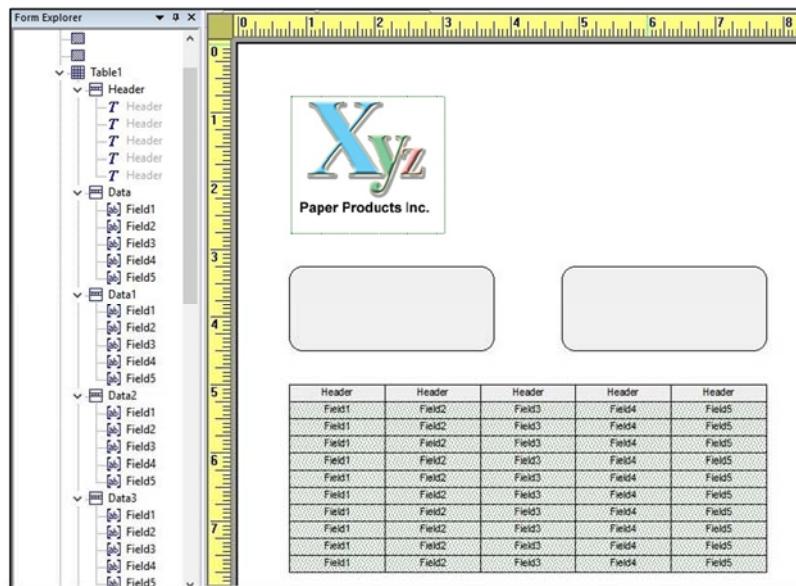
5. To draw the table on the page, you'll use the object positioning marks on the Rulers.
 - Position the cursor at the 0.75" mark on the horizontal ruler and at the 5" mark on the vertical ruler.

- Hold the mouse button and drag the mouse diagonally down the page. When the positioning lines are at 7.75" on the horizontal and vertical Rulers, release the mouse button.

6. Deselect the table, and save your work.

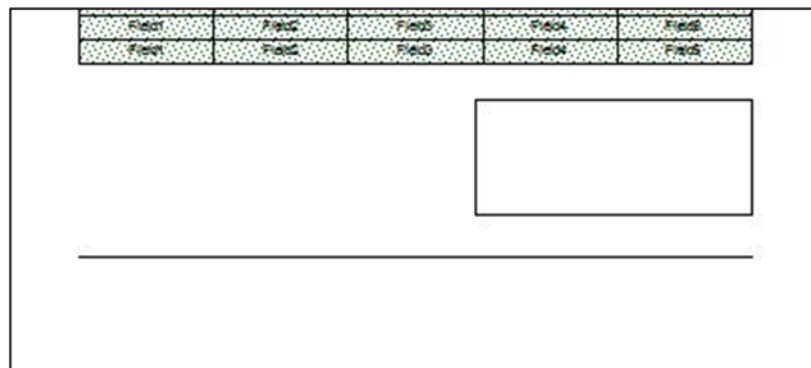
DocOrigin Design creates a table of 5 columns and 11 rows; there is one header row and 10 rows for the line items. Each cell of the header row contains the text label "Header" as a placeholder for a column heading. Each cell of the data rows contains a field with a name that is unique for that row, but common for the column in which it appears.

In the Form Explorer, familiarize yourself with the structure of the table. Note that the text labels for the "Header" row appear at the same level in the hierarchy as the "Data" rows. Under each uniquely named "Data" row is the set of uniquely named fields for that row.



Add Placeholders for the Table Footer and Page Footer

Below the table, you'll add some additional objects that will complete the general design of the invoice. When you finish, the bottom of the layout should look similar to this.




1. To create a placeholder for the invoice totals area, draw a rectangle under the table and align the rectangle to the right-hand side of the table. You'll size and complete this rectangle later.
2. Draw a horizontal line at the 9.75" increment on the vertical Ruler, from the 0.75" to the 7.75" increment on the horizontal Ruler. You'll add the text labels for the page footer later.
3. Save your work.

The general layout for the invoice is complete. Next, we'll start at the top of the layout again and you'll work with text labels and fields to complete the layout process.

Exercise 2: Work with Text and Fields



You use the Text Label object to place static text on a layout. With DocOrigin, each text label can contain more than one font size and font style. You can also set attributes such as justification, tabs, indents, margins and line spacing. DocOrigin Design automatically word-wraps text within text labels. The justification options control the horizontal and vertical alignment of the text.

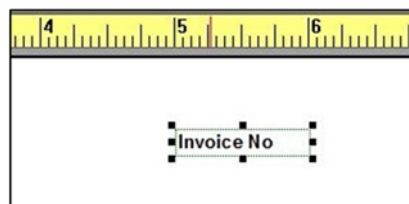
First, you'll create the text labels at the top of the layout for the Invoice No, Invoice Date and Purchase Order No. Then you'll add the associated fields.

1. Click the **Text** tool  on the Toolbar, click on the page to place a text label, and type "Invoice No".






You can create the first text label and set the appropriate properties, and then duplicate it to create the other text labels. This method ensures consistency for the vertical height, justification and font for all of the text labels. You can then simply change the text, as required.

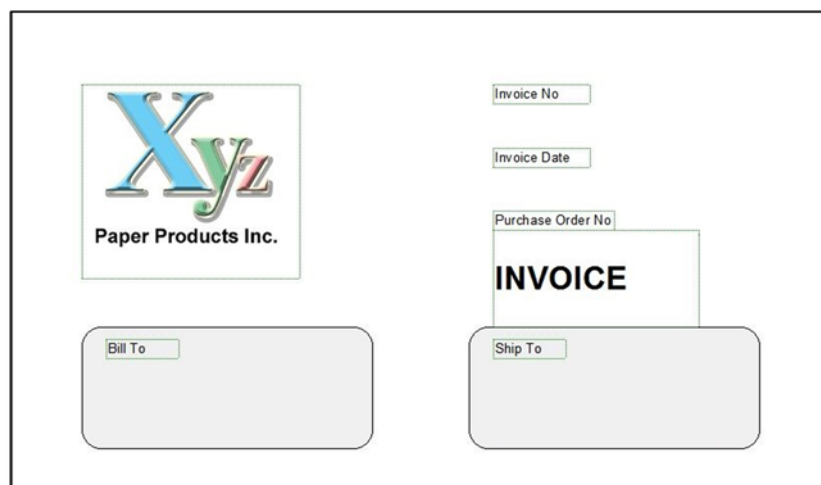
2. Highlight the text using the cursor.
3. Using the **Font** tab in the Common Properties window, verify the font is Arial and the size is 10 point. Check **Bold**.
4. On the Toolbar, set the horizontal justification to **Left**.  Set the vertical justification to **Middle**. .
5. Press ESC to toggle from typing mode to move mode.
6. Position the object at the 5" increment on the horizontal Ruler.
7. Duplicate the text label by clicking CTRL + D. Use the Down arrow key to move the new text label so that it is completely visible.
8. Set the text on the new text label to "Invoice Date".
9. Follow steps 7 and 8 to create a text label for "Purchase Order No".



You will have to size the text label for "Purchase Order No" in order for the text to fit on one line.

10. To align the objects horizontally, lasso the Invoice Date and Purchase Order No text labels. Hold the CTRL key, and select the Invoice No text label. Click **Format > Align to Object > Left**.

11. Deselect the objects.
 12. To space the objects vertically:
 - Align the Invoice No text label with the top of the logo.
 - Align the Purchase Order No text label with the bottom of the logo.
 - To space the text labels, select the three objects, and click **Format > Space Objects Evenly > Down**.
 13. Add text labels called "Bill To" and "Ship To". This time, use the X,Y Coordinates at the bottom of the window to place the "Bill To" text label in its appropriate rectangle at the (1.0X 3.375Y) coordinates.
 14. Place the "Ship To" text label at the 5.0" increment on the horizontal Ruler.
 15. Top-align the "Ship To" text label to the "Bill To" text label.
 16. To create a title for the layout, create another text label in the blank space between the Purchase Order No and the Ship To rectangle at the 5" increment on the horizontal Ruler.
 17. Set the text to "INVOICE".
 18. Highlight the text. On the **Font** tab of the Common Properties window, set the **Typeface** to Arial, the **Size** to 24 and check **Bold**.
 19. Set the justification to **Left**  and the vertical alignment to Center. 
-  When you create a text label with a long string of text or a large font, the text label must have enough vertical and horizontal space to ensure all the text is appropriately readable. You may have to size the text label or adjust the font size in order to properly see all of the text in the space available.
20. Deselect the object, and save the layout. The top portion of the layout should look similar to this:




21. Make any adjustments to your layout, and save again.

Create Single Line and Multi-Line Fields

DocOrigin Design is used to create document layouts that, when merged with your application data, produce customer-focused, high quality business documents. DocOrigin Merge matches the field names in the data stream to the fields on the layout and places the appropriate values in the fields to produce the document.

Fields can be formatted according to their individual requirements by setting properties such as field name, field type, font characteristics, height, width and so on.

To add the fields to the top of the layout:

1. Click the **Field** icon  on the Toolbar.
2. Click to place a field next to the Invoice No text label. Adjust the size and position as necessary.



Note that DocOrigin Design automatically assigns a name to the field, "Field6". You can review the default properties for the field on the **Field** tab in the Object Properties window, and on the tabs in the Common Properties window.

3. In the Object Properties window, on the **Field** tab, change the name of the field from Field6 to INV_NO.



To change the name of an object in the Form Explorer:

- click the object and press F2
- OR
- right-click on the object and click **Rename Object**.

4. Deselect the field. Note that the field name is changed.

Create 2 additional fields for the Invoice Date and Purchase Order No. On the **Field** tab of the Object Properties window, set the following properties:

| Field Name | Display as | Format as | Picture |
|------------|------------|-----------|------------|
| INV_DATE | Text | Date | MM/dd/yyyy |
| PO_NO | Text | String | (none) |

5. Move the INV_NO and PO_NO fields to the appropriate positions beside their respective text labels, and top-align each text label and field pair.
6. Position the PO_NO field at the 6.5" increment on the horizontal Ruler.
7. Lasso the 3 fields, ensure the PO_NO field is the last object selected.
8. Click **Format > Align to Object > Left**.
9. Deselect the fields.

To create multi-line fields for the Bill To and Ship To name and address:

10. Draw a field that is several lines high in the Bill To rectangle.



When objects are layered, for example, on this layout the text labels and fields overlay the filled rectangle, it's sometimes difficult to select an object using the cursor. Instead, select an object by clicking on its name in the Form Explorer or by using the lasso method.


11. Duplicate the field and position it in the Ship To rectangle.

12. Left align the each field with its respective text label.

13. Change the field names to BILL_TO and SHIP_TO.

14. For each field, on the **Field** tab in the Object Properties window

- Uncheck the **Single Line** check box. This will allow for multiple lines of address.
- Uncheck **Adjust Height**. This will ensure field size is fixed and that the data in the field will not expand the field height beyond the rectangle, that is, excess data will be truncated.

15. On the Toolbar, click Top  to set the vertical alignment for the data in the field.

16. Top align the BILL_TO and SHIP_TO fields.

17. Deselect the fields, and save the layout.

The top of your layout should look like similar to this.



Work with a Static Table

Next, you'll move down the layout to the table, where you'll provide the appropriate column headings and assign meaningful names to the columns of fields.

1. To rename the column headings and bold the heading names, repeat the following steps for each column:

- Click on the word "Header".
- Highlight the text, and rename the heading appropriately for the column as shown below:
- Set the text to bold: click the **B** icon on the Toolbar OR type CTRL+B OR on the **Font** tab in the Common Properties window, check **Bold**.

When you finish, the table headings should look similar to this:

| Item | Description | Qty | Unit Price | Extended Price |
|--------|-------------|--------|------------|----------------|
| Field1 | Field2 | Field3 | Field4 | Field5 |
| Field1 | Field2 | Field3 | Field4 | Field5 |
| Field1 | Field2 | Field3 | Field4 | Field5 |

The next step is to size the columns, which can be done in two ways:

- Set a specific **Width** value for each column using the **Position** tab in the Common Properties window.

OR

- Select the table, then position the cursor on the vertical line between any two columns in the table. Drag and drop the vertical line to adjust the column width. Use the object positioning marks on the Ruler to determine the column width.

| Item | Description |
|--------|-------------|
| Field1 | Field2 |
| Field1 | Field2 |
| Field1 | Field2 |
| Field1 | Field2 |

Given the width of the table is 7", use both of the methods described above to set the column widths as follows:





- Set Item and Qty to 1.0"
- Set Description to 2.5"
- Set Unit Price and Extended Price to 1.25".

When you are finished, your layout should look similar to this:

| Item | Description | Qty | Unit Price | Extended Price |
|--------|-------------|--------|------------|----------------|
| Field1 | Field2 | Field3 | Field4 | Field5 |
| Field1 | Field2 | Field3 | Field4 | Field5 |
| Field1 | Field2 | Field3 | Field4 | Field5 |

- Change the field names in each column to more meaningful names and set the field properties using the table below. A blank entry below indicates that the DocOrigin Design default is the appropriate value.

To select one column of fields at a time, start at the bottom of the table and use the lasso method. Be sure to omit the column heading.

| | Object Properties, Field Tab | | | Toolbar Button |
|--------------------|------------------------------|-----------|------------|---|
| Default Field Name | Rename Field To | Format as | Picture | Alignment |
| Field1 | ITEM | | | |
| Field2 | DESC | | | Left  |
| Field3 | QTY | Number | | Right  |
| Field4 | UNIT_PRICE | Currency | \$#,##0.00 | Right  |
| Field5 | EXT_PRICE | Currency | \$#,##0.00 | Right  |



Field names can be all uppercase letters, all lowercase, camelCase, or any combination of upper and lower case letters. However, the field names on the document layout **must** match the case of the field names in the XML data stream derived from your databases.

- Deselect the table column.
- The last step is to ensure that each row in the table will appear only once in the document.
 - Select all the data rows.
 - In the Object Properties window, click the **Row** tab. Uncheck **Allow this Row to appear multiple times**. This setting is used for dynamic layouts, discussed in Lesson 4.
- Deselect the table, and save the layout.

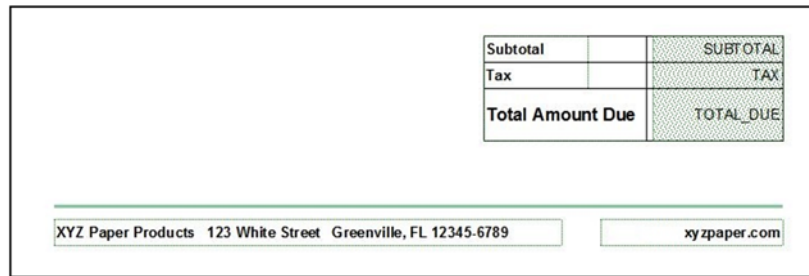
When you are finished, the table should look like this:

| Item | Description | Qty | Unit Price | Extended Price |
|------|-------------|-----|------------|----------------|
| ITEM | DESC | QTY | UNIT_PRICE | EXT_PRICE |
| ITEM | DESC | QTY | UNIT_PRICE | EXT_PRICE |
| ITEM | DESC | QTY | UNIT_PRICE | EXT_PRICE |
| ITEM | DESC | QTY | UNIT_PRICE | EXT_PRICE |
| ITEM | DESC | QTY | UNIT_PRICE | EXT_PRICE |
| ITEM | DESC | QTY | UNIT_PRICE | EXT_PRICE |
| ITEM | DESC | QTY | UNIT_PRICE | EXT_PRICE |
| ITEM | DESC | QTY | UNIT_PRICE | EXT_PRICE |
| ITEM | DESC | QTY | UNIT_PRICE | EXT_PRICE |
| ITEM | DESC | QTY | UNIT_PRICE | EXT_PRICE |

View the table in the Form Explorer again. Notice that the text labels in the "Header" section are now named appropriately, and for each data row, the fields are now renamed as well.

Complete the Layout




Below the table are the areas for the table footer and page footer. You'll add the text labels and fields to complete the layout for the invoice. When you finish, the bottom of the layout should look similar to this.






You may want to **Zoom In**  to enlarge the lower portion of the layout at the bottom of the page.

To complete the table totals:

- To the left of the totals rectangle, add a text label for each of "Subtotal", "Tax" and "Total Amount Due", and stack the text labels vertically. Set the following properties:

| | Common Properties | | Toolbar Button |
|------------------|-------------------|---------------|--|
| | Position Tab | Font Tab | |
| Text | Height | Font | Vertical Alignment |
| Subtotal | 0.25" | Bold | Middle  |
| Tax | 0.25" | Bold | Middle  |
| Total Amount Due | 0.5" | Arial 12 Bold | Middle  |

- Add a field for each of the text labels and set the appropriate properties:

| Object Properties Field Tab | | | Common Properties Font Tab | Toolbar Button |
|--------------------------------|-----------|------------|-------------------------------|---|
| Field Name | Format as | Picture | Font | Justification |
| SUBTOTAL | Currency | \$#,##0.00 | Bold | Right  |
| TAX | Currency | \$#,##0.00 | Bold | Right  |
| TOTAL_DUE | Currency | \$#,##0.00 | 12 point Bold | Right  |



By selecting several objects, you can set those properties that are common to them all. Then you can select each object individually and set any object-specific properties. For example, by selecting the 3 fields, you could set the format and picture, bold the font and set the alignment. Then you would select the TOTAL_DUE field and set the font size.

3. Align each field with the appropriate text label.
4. Select the 6 objects and move them into the rectangle, aligning the right edge of the fields with the right edge of the rectangle.
5. Size the rectangle to encompass the objects.
6. Draw the vertical and horizontal lines.
7. Make any adjustments necessary, and save the layout.

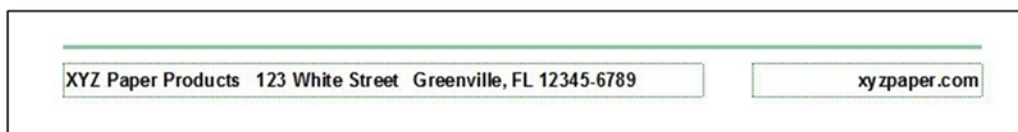
| | | |
|-------------------------|--|------------------|
| Subtotal | | SUBTOTAL |
| Tax | | TAX |
| Total Amount Due | | TOTAL_DUE |

When you finish, the totals area should look similar to the graphic above.

To complete the page footer:


8. Select the line. Use the Common Properties window to set the following properties:
 - On the **Color** Tab, set the color (RGB) values to: Red = 130, Green = 202 and Blue = 156.
 - On the **Line/Edge** Tab, set the Line Width to 0.03".
9. Under the line, create the 2 text labels, one for the company information and one for the web address.
 - Set the text as shown in the graphic above. Bold the text. Set the justification to Left for the company address, and Right for the web address.
 - Align these objects horizontally and vertically.
10. Again, save the layout.

The page footer should look similar to this:



Congratulations! You have finished your first document layout.

11. Review the layout, and make any necessary modifications, and save your layout.
12. To view your layout as it currently appears, proceed to the next chapter, *Test a Document Layout*. Once you see how your layout looks in PDF format with "test" data, you can make adjustments and corrections.



XYZ
Paper Products Inc.

Invoice No

Invoice Date

Purchase Order No

INVOICE

Bill To

Ship To

| Item | Description | Qty | Unit Price | Extended Price |
|------|-------------|-----|------------|----------------|
| ITEM | DESC | QTY | UNIT_PRICE | EXT_PRICE |
| ITEM | DESC | QTY | UNIT_PRICE | EXT_PRICE |
| ITEM | DESC | QTY | UNIT_PRICE | EXT_PRICE |
| ITEM | DESC | QTY | UNIT_PRICE | EXT_PRICE |
| ITEM | DESC | QTY | UNIT_PRICE | EXT_PRICE |
| ITEM | DESC | QTY | UNIT_PRICE | EXT_PRICE |
| ITEM | DESC | QTY | UNIT_PRICE | EXT_PRICE |
| ITEM | DESC | QTY | UNIT_PRICE | EXT_PRICE |
| ITEM | DESC | QTY | UNIT_PRICE | EXT_PRICE |
| ITEM | DESC | QTY | UNIT_PRICE | EXT_PRICE |

| | | |
|-------------------------|--|------------------|
| Subtotal | | SUBTOTAL |
| Tax | | TAX |
| Total Amount Due | | TOTAL_DUE |

XYZ Paper Products 123 White Street Greenville, FL 12345-6789

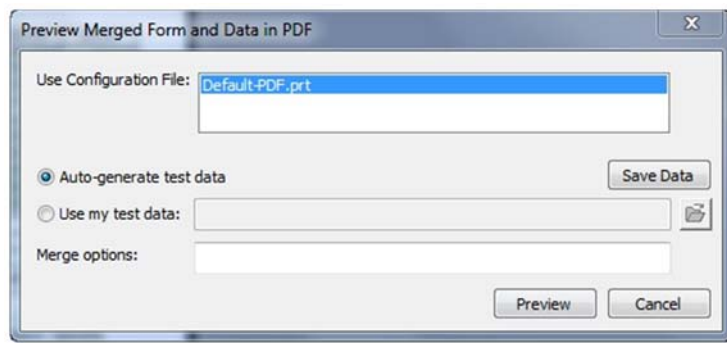
xyzpaper.com

Lesson 3: Test a Document Layout

While you are developing a layout in DocOrigin Design, you can use the PDF Preview or HTML Preview function to view the document that will result from the layout. The Preview functions are a very useful development tool; they enable you to make corrections or modifications throughout the layout process, and not just at the end when the layout is "complete". For PDF Preview, you simply require Adobe® Acrobat Reader on your computer to view the resulting output. This is an effective, fast and paperless way to test your layout even if your ultimate output target is a printer.

To use the PDF Preview feature in DocOrigin Design:

1. Open the invoice you created in the previous lesson.
2. Click **Tools > PDF Preview** from the menu.



3. Ensure **Auto-generate test data** is selected. This feature will generate a "test" data file.
4. Click **Save Data** to save the auto-generated data file. Note the location where you store this file. You'll look at this file shortly.
5. Once the file is saved you are returned to the dialog. Note that now **Use my test data** is selected and the file you just saved is the target data file.
6. Click **Preview**.

The PDF Preview function initiates DocOrigin Merge to combine the layout with automatically generated data to produce the document. At the same time, DocOrigin Merge creates a log file as an audit trail of its activity. Should DocOrigin Merge encounter an issue during processing, the PDF Preview will prompt you to open the log file. It is helpful to open the log file to view any errors.

7. Click **Yes** to open the log file. Adobe Reader opens to display the document.

The XML Data Stream

The data stream that DocOrigin Merge combines with the layout must be in XML (Extensible Markup Language) format. XML is a markup language that defines a set of rules for encoding documents in a format that is both human-readable and machine-readable.

9. Launch a plain text editor, such as Notepad. Open the data file that you generated earlier. The top of the data file should look similar to this:

10. The data file is in XML format. There is an opening and closing tag for each document, page, table and table row and field in the document layout. The field names for the data elements are the names you set that appear in the Form Explorer.

11. On the layout, the properties for UNIT_PRICE and EXT_PRICE are set to currency with a currency symbol and 2 decimal places. When DocOrigin Merge generates the document, it will format the numeric values according to the properties set in the document layout.

12. Scroll down to the bottom of the file.

Note that the Invoice Date on the PDF preview is the current date in the format you specified, "MM/dd/yyyy". Find the XML tag for the INV_DATE field. Note that the date appears in "yyyy-mm-dd" format. Dates coming into DocOrigin Merge from your application data must be in this format so that it can be output according to the format specified in the document layout.

You can change any of the data values in the data file and use PDF Preview to view the changes; however, ensure that you don't delete any of the XML tag information.

13. When you are finished, exit DocOrigin Design, and close the plain text editor.

Top of the Data Stream

```
<?xml version="1.0" encoding="UTF-8"?>
<XmlData>
<Document>
<Page1>
  <Table1>
    <Data>
      <ITEM>xxxxxxxxxx</ITEM>
      <DESC>xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx</DESC>
      <QTY>1234567890</QTY>
      <UNIT_PRICE>1234567890</UNIT_PRICE>
      <EXT_PRICE>1234567890</EXT_PRICE>
    </Data>
    <Data1>
      <ITEM>xxxxxxxxxx</ITEM>
      <DESC>xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx</DESC>
      <QTY>1234567890</QTY>
      <UNIT_PRICE>1234567890</UNIT_PRICE>
      <EXT_PRICE>1234567890</EXT_PRICE>
    </Data1>
    <Data2>
      <ITEM>xxxxxxxxxx</ITEM>
      <DESC>xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx</DESC>
      <QTY>1234567890</QTY>
      <UNIT_PRICE>1234567890</UNIT_PRICE>
      <EXT_PRICE>1234567890</EXT_PRICE>
    </Data2>
```

Bottom of the Data Stream

```
<Data9>
  <ITEM>xxxxxxxxxx</ITEM>
  <DESC>xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx</DESC>
  <QTY>1234567890</QTY>
  <UNIT_PRICE>1234567890</UNIT_PRICE>
  <EXT_PRICE>1234567890</EXT_PRICE>
</Data9>
</Table1>
<INV_NO>xxxxxxxxxx</INV_NO>
<INV_DATE>2016-03-29</INV_DATE>
<PO_NO>xxxxxxxxxx</PO_NO>
<BILL_TO>xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx</BILL_TO>
<SHIP_TO>xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
xxxxxxxxxx
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx</SHIP_TO>
<SUBTOTAL>1234567890</SUBTOTAL>
<TAX>1234567890</TAX>
<TOTAL_DUE>1234567890</TOTAL_DUE>
</Page1>
</Document>
</XmlData>
```

Lesson 4 - Build a Dynamic Document Layout

In this lesson, you will create a dynamic invoice layout that will enable DocOrigin Merge to handle any number of line items, rather than the fixed number of line items on the static invoice in Lesson 2.

Dynamic layouts use the container and pane objects. The container defines the area on the output page that the dynamic content will occupy. The panes and the objects placed inside the panes are the dynamic content of the layout. Panes reside within the container; each pane contains a portion or section of the document that DocOrigin Merge may generate based on its properties, JavaScript scripting and the content of the data stream.

Objects on the layout reside either on the dynamic or static "layer". Only one layer is active at a time, and when active, all of the typical objects and operations are available. The panes and the objects placed inside the panes, are on the dynamic layer of the layout. Objects placed directly onto the layout page, including the container, are in fixed positions on the page, and as such, are on the static layer of the layout.

You can easily toggle between the layers by selecting an object in the Form Explorer. Or, you can use the **View – Dynamic Objects** or **View > Static Objects** commands to select the active layer. As well, the **View > Gray Inactive Objects** command enables you to more easily distinguish the active objects.

The dynamic invoice layout will be constructed from some of the objects on the static layout in order to save the time it would require for you to redraw the objects and set the appropriate properties.



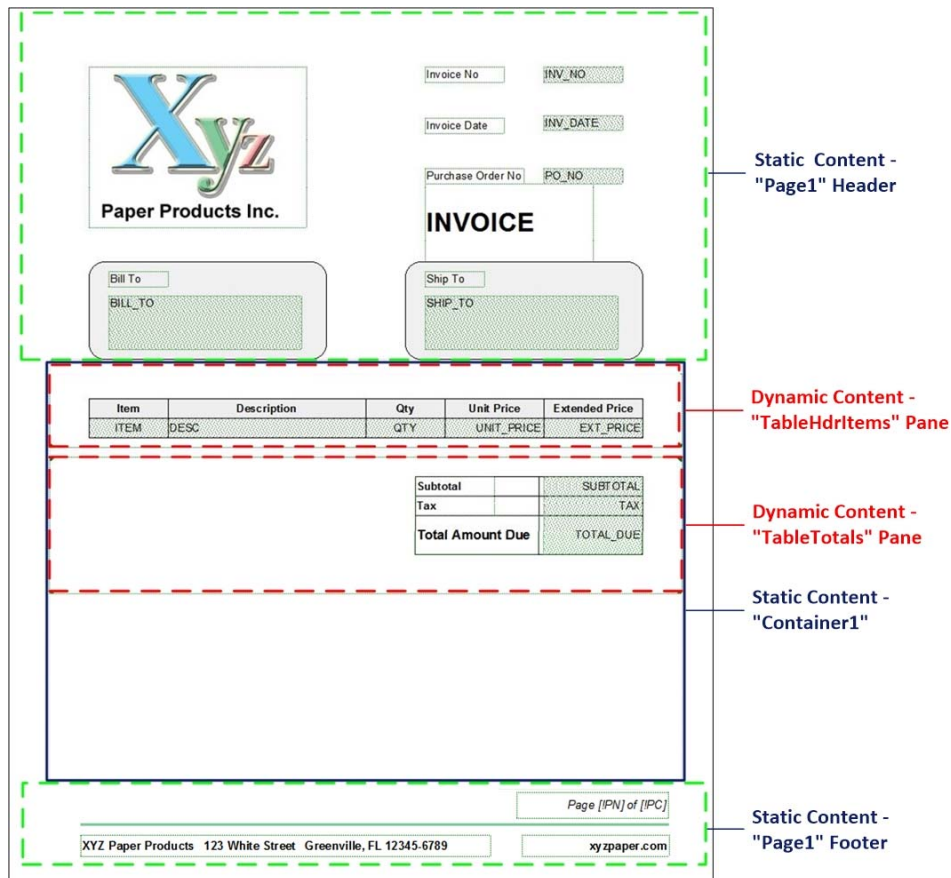
Should you prefer to redraw the layout, be sure to set the properties for each object as specified in Lesson 2 and in this Lesson.

The layout contains 2 pages. When it generates the output for the invoice, DocOrigin Merge will use "Page1" of the layout for the first page of each document. When a document requires additional or "overflow" pages due to the volume of data in the data stream, "Page2" of the layout will be activated. A document generated from this layout may contain as many occurrences of "Page2" as are required to satisfy the content (that is, the number of line items) in the data stream. The properties assigned to the pages and to the dynamic objects, particularly the panes, table and table rows, provide information to DocOrigin Merge for generating the document, such as:

- which sections of the document are mandatory (must appear on the document)
- the number of times an object or group of objects can occur
- the page to activate when an overflow situation occurs
- whether the rows of a table can be split across pages
- page numbering and page count.

The graphics on the following pages describe the layout for the dynamic invoice.

"Page1" of the Dynamic Invoice Layout

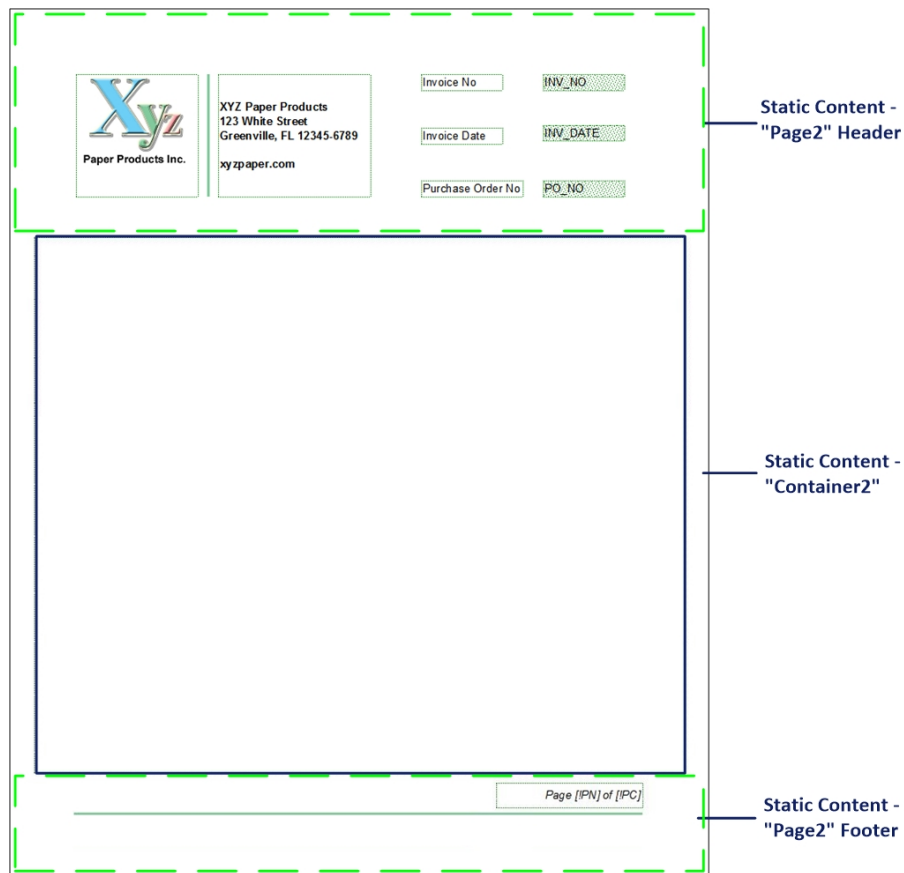


Note that the colored outlines on the graphics for Page1 above and Page2 below are only to highlight the sections of the layout for readability purposes

As shown in the graphic above, "Page1" will contain both static and dynamic content:

- **Static Content – "Page1" Header** – This is the header that will appear on page 1 of the document only. The objects will be copied from the static invoice layout and pasted into the dynamic invoice layout.
- **Static Content – "Container1"** – The container is a static object that defines a fixed area on the page where the dynamic content will appear.
- **Dynamic Content – "TableLineItems" Pane** – The line items table requires only the header row and one detail row. The properties you'll set for the detail row will cause DocOrigin Merge to create a row for every line item in the data stream.
- **Dynamic Content – "TableTotals" Pane** – This is the totals area that will appear on the document once all of the line items in the data stream have been processed. The objects will be copied from the static invoice layout and pasted into the pane on the dynamic invoice layout.
- **Static Content – "Page1" Footer** – This is the footer that will appear on page 1 of the document only. The objects will be copied and pasted from the static invoice layout. The additional text label above the line uses embedded fields to number the pages in the format "Page X of Y".

"Page2" of the Dynamic Invoice Layout



As shown in the graphic above, "Page2" will contain only static content:

- **Static Content – "Page2" Header** – This is the header that will appear on all overflow pages for the document.
- **Static Content – "Container2"** – The container identifies the area on the page where the dynamic content for the panes on "Page1" of the layout will appear. When DocOrigin Merge generates the document, the dynamic content from "Page1" will overflow into the container on "Page2".
- **Static Content – "Page2" Footer** – This is the footer that will appear on any overflow pages in the document.

Before You Begin

These are a few of the considerations to keep in mind when working with dynamic layouts:

1. **Naming Objects:** We recommend that you assign meaningful names to objects. Doing so makes it easier to review the data stream when issues arise. Especially, provide unique and meaningful names to panes.
2. **Margins:** To create margin between sections of the document, leave the appropriate amount of space at the top of the pane, and place all objects below.


3. **Size a pane:** When you size a pane, all the panes below the selected pane will move up or down on the layout to accommodate the newly sized pane.
4. **Unlimited panes per layout page:** You can place an unlimited number of panes on a page, and the panes may appear to overflow the layout area. DocOrigin Merge will use the scripting and properties in the layout to determine when to trigger a new page to handle page overflow.
5. **Copy and Paste objects:** When objects are copied to the Clipboard, DocOrigin Design also copies the "relative" coordinates of the objects' positions on the layout, as follows:
 - When copying objects from a static layout or from the static layer of a dynamic layout, the objects' coordinates are relative to the top-left corner of the layout area.
 - When copying objects from the dynamic layer (that is, in a pane) of a dynamic layout, the coordinates are relative to the top-left corner of the pane.

When the objects are pasted onto another page or another layout, DocOrigin Design will attempt to place the objects at their "relative" coordinates, as follows:


- When pasting objects to a static layout or to the static layer of a dynamic layout, the objects will be placed relative to the top-left corner of the layout area based on their coordinates, regardless of whether they were copied from a static or dynamic source. The objects may overlap other objects that are already on the layout.
- When pasting objects into a pane on a dynamic layout, the objects will be placed relative to the top-left corner of the pane based on their coordinates, regardless of whether they were copied from a static or dynamic source. When there is not enough vertical space for the objects, unexpected results may occur, and the objects may overlap at the bottom of the pane.

Start the Dynamic Layout

To start a new dynamic document layout:

1. Launch DocOrigin Design.
2. Click **File > New** or click **New**  on the Toolbar.

For this lesson, you'll copy and paste the objects from the static invoice that you created, so you'll open that layout as well.

3. Click **Open**  on the Toolbar and navigate to the folder where your static invoice resides.
4. Open the appropriate layout.
5. Use one of the **Window** menu commands to select your preferred arrangement for the two windows.
6. Activate the window for the dynamic layout to begin the layout process.

Add a Page to the Layout

"Page2" of the dynamic layout will be used as the overflow page, when the volume of data in the data stream fills "Page1" and requires subsequent for the document content. As shown on page 41, "Page2" will contain a modified header and a simplified footer. The only other object on the page is a container, which DocOrigin Merge will use to flow the panes from "Page1".

To add another page to the layout:

1. Click **Insert > Page > Insert After this Page**.

DocOrigin Design inserts a new page into the layout, and in the Form Explorer, "Page2", "Container2" and "Pane2" are added.




When a layout has more than one page, in the Form Explorer, we recommend that the name for each page, container and pane be unique.

Get Started on "Page1"

Now that you have the appropriate number of pages in the layout, return to "Page1".

The container defines the area where the dynamic content will appear on the document. Since you'll use the header and footer from the static invoice layout and place them as static objects, you'll size the container appropriately.

1. **Zoom out**  to view the entire layout.
2. Click on the container icon in the Form Explorer:
 - Drag the top of the container down to the 4.5" increment on the vertical Ruler.
 - Drag the bottom of the container up to the 9.5" increment on the vertical Ruler.
3. Deselect the container.

The layout should look like the graphic on the right.


After Sizing the Container




Create a Static Page Header and Footer

First, you'll create the static page header and page footer on "Page1". Since the container was the last selected object, the static objects layer is currently active.

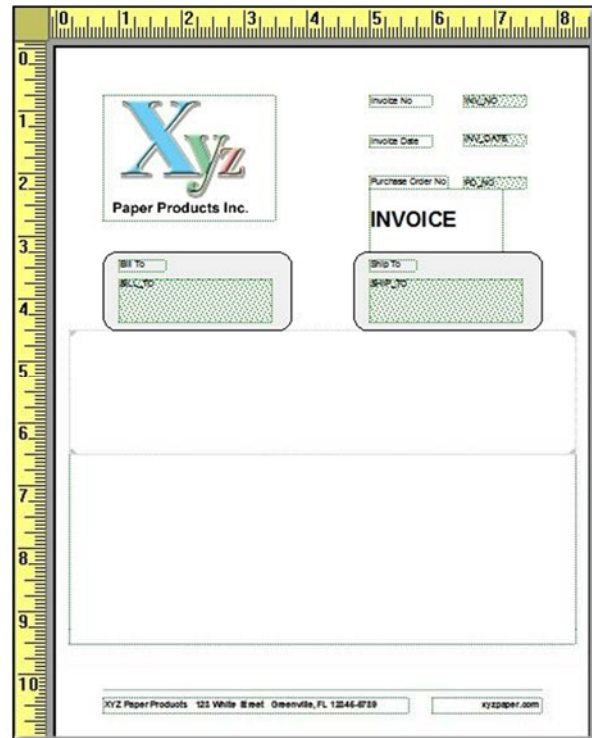
To copy the header and footer from the static invoice to the new layout:

1. **On your static invoice layout**, lasso the objects for the page header. Copy the objects to the Clipboard:
click **Copy**  on the Toolbar or press CTRL+C.

After Adding the Header and Footer

2. **On your dynamic layout**, paste the objects: click **Paste**  on the Toolbar or press CTRL+V.

If necessary, move the objects so the top-left corner of the logo at the 0.75" increment on both Rulers.
3. Deselect the objects.
4. Size the logo so that it's 2.75" wide and 2" high.
5. Deselect the logo, and save the layout.
6. **On your static invoice layout**, lasso and copy the objects for the page footer.
7. **On your dynamic layout**, paste the objects.
8. Position the line at the 0.75" increment on the horizontal Ruler and the 10.25" increment on the vertical Ruler.
9. Deselect the objects, and save your layout.
10. Your dynamic layout should look similar to this graphic.





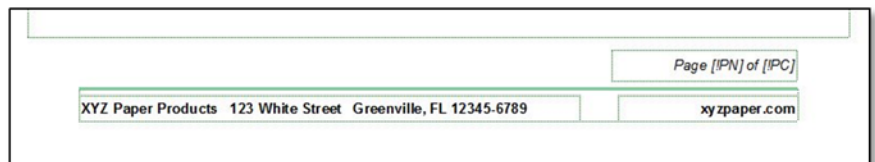
Use Automatic Page Numbering and Page Count

Embedded fields are metatags within a text label where DocOrigin Merge automatically inserts the value. The embedded metatag can be either an existing field name on the layout (such as [INV_NO] or a "!" (exclamation mark) character followed by one of the predefined tags.

On the dynamic layout, you'll embed fields in a text string in the page footer that will output "Page X of Y" on the document. For "X" (page number), the metatag is "[!PN]", and for "Y" (page count), the metatag is "[!PC]".

To add the page numbering to the footer:

1. **Zoom In**  to enlarge the layout area.
2. Create a text label in the footer area on the layout. Set the text to: Page [!PN] of [!PC].
3. Set the font to italics by clicking the **Italics** icon  on the Toolbar.
4. Position the text label above the line, at the right.
5. Deselect the object, and save your layout. When you are finished, the page footer should look similar to the graphic above.



Create an Object Group

When you have a number of objects that are associated, for example, the objects that comprise the page header or footer, you can group these objects to link them together into a single unit. You would group objects to move or size the objects as a group, or as you will do, to create a level in the Form Explorer for a less cluttered view of that window.

To create an object group for the page footer:

1. Select all the objects in the page footer.
2. Right-click to open the menu and click **Link Objects Into Group**.

DocOrigin Design displays a rectangle around the object group, and in the Form Explorer, all of the objects are located under a new Group icon.

3. In the Form Explorer, click beside the Group icon, and assign the name "PageFtrGrp".



You can expand or collapse the hierarchy in the Form Explorer by clicking the arrow beside the Group icon.

4. Deselect all objects, and save your layout.

To create an object group for the page header:

1. Scroll to the top of the layout, and select all the objects for the page header.
2. Right-click to open the menu and click **Link Objects Into Group**.

DocOrigin Design displays a rectangle around the object group, and in the Form Explorer, all of the objects are located under the Group icon.

3. In the Form Explorer, click beside the Group icon, and assign the name "PageHdrGrp" to the group.
4. Deselect all objects, and save your layout. The header on your dynamic layout should look similar to this:



Set Global Fields

Often, there is one or more fields that must appear on every page of a document, to uniquely identify the document or the intended recipient. Rather than including many occurrences of the fields in the data stream, you set the Global property for a field wherever it occurs on the layout, whether it occurs several times on the same page, or on several pages. The value for the field need only occur once in the data stream; DocOrigin Merge will use the value in all occurrences of the field where the Global property is set.

Later in this lesson, you'll create "Page2" of the layout, which will be used to accommodate line items that overflow from the first page of the document onto a second or subsequent pages. The header for "Page2" will be different than on "Page1", but will contain the INV_NO, INV_DATE and PO_NO fields and the associated text labels. These are the fields that will be Global on both "Page1" and "Page2" to ensure the values appear on all pages of the document.

To set the Global field property:

1. On the layout, lasso the fields for INV_NO, INV_DATE and PO_NO.
2. In the Object Properties, on the **Field** tab, check **Global**.
3. Deselect the objects, and save your layout.

Work with Panes


Now, you'll focus on the dynamic content of the layout, creating the two panes for the invoice shown on page 40. The panes contain the dynamic content, and their properties provide DocOrigin Merge with instructions on how to generate that portion of the dynamic document.

Currently, the layer containing the static objects is active. To activate the dynamic objects layer, click "Pane1" in the Form Explorer.

Create a Dynamic Table

You'll add the dynamic table for the invoice. The table will contain the header row and only one line item row. You'll set the appropriate properties to allow any number of line items on the invoice. When the document is generated, the line items will flow down the pane until the pane fills the container on "Page1", then the pane will overflow into the container you'll create on "Page2". DocOrigin Merge will generate as many overflow pages as is necessary to output all of the line items in the data stream. Once all the line items have been output, DocOrigin Merge will output the table totals area to complete the document.

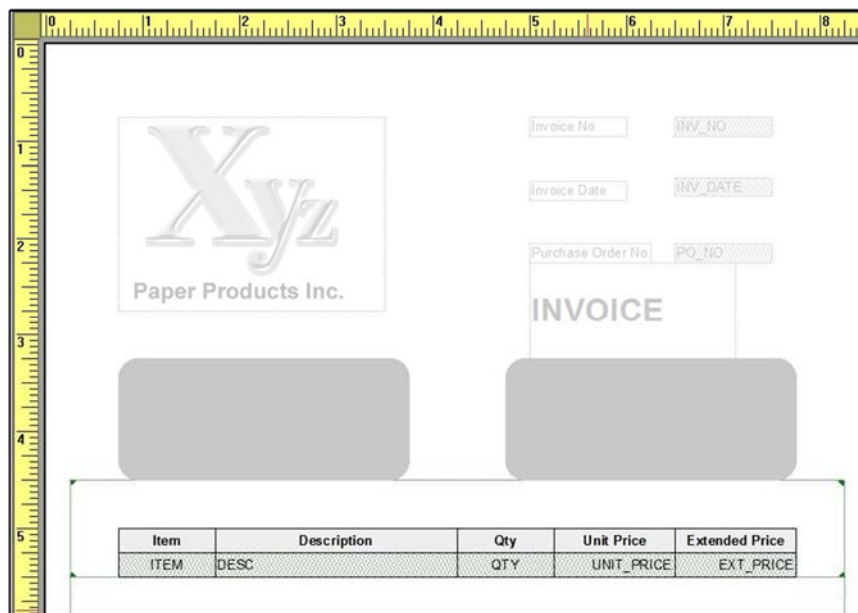
If you want to practice creating a table, you can follow the instructions in the previous lesson and create a table with only the header row and 1 detail row. Or, you can follow the instructions below and copy the table from the static invoice and then make the appropriate changes.

1. **On the static layout**, in the Form Explorer, select "Table1".
2. Click the **Copy** icon  on the Toolbar or CTRL+C.

3. On the **dynamic layout**, in the Form Explorer, select "Pane1".
4. Rename the pane to "TableHdrItems".
5. Size the pane by dragging the bottom-center handle down until the edge is just above the edge of the container.
6. Paste the table into the selected pane.
7. Position the table so that the top-left corner is at the 0.75" increment on the horizontal Ruler and the 5.0" increment on the vertical Ruler.
8. Deselect the object.

To remove the unwanted rows:

9. In the Form Explorer, under "Table1", select "Data1", then press the SHIFT key and click "Data9". Press the DELETE key.
10. Select the "TableHdrItems" pane. Size the pane so that the bottom edge of the pane is at the bottom edge of the table row.
11. Deselect the pane, and save your layout. Your layout should look similar to the graphic below. Note that:
 - The static objects in the header are grayed out. This is because the dynamic layer is active and the **View > Gray Inactive Objects** command is set.
 - White space at the top of the "TableHdrItems" pane will provide an area of separation on the document.
 - When the bottom of the pane is at the bottom of a repeating set of objects, like the line items row, there will be no vertical space between the objects, facilitating a table-like structure.

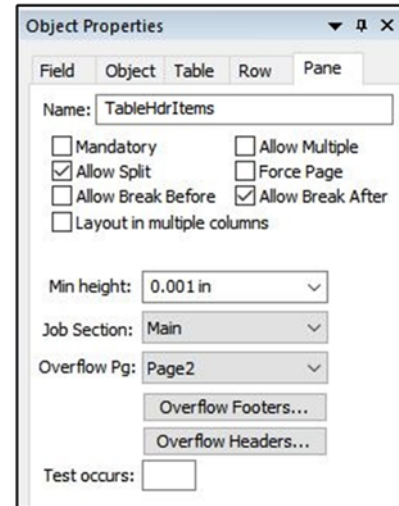


Set the Pane Properties

These properties identify the circumstances that allow DocOrigin Merge to cause a page break in the document:

1. Select the "TableHdrItems" pane.
2. In the Object Properties windows, click the **Pane** tab.
3. Check the properties as shown in the graphic:
 - **Allow Split** – enables DocOrigin Merge to page break when the data has filled the container, that is, no more data can fit on the current page of the document.
 - **Allow Break After** – enables DocOrigin Merge to page break, if necessary, when all the data for the current pane is processed and there is not enough room on the document page to place the content of the next pane.
4. Uncheck any other properties.

Pane Tab



5. Set **Overflow Pg** to "Page2" – tells DocOrigin Merge which layout page to activate when the document page is full and there is more data to process for the pane.

When you finish, the properties for the pane should be set as shown in the graphic to the right.

Set the Table Properties

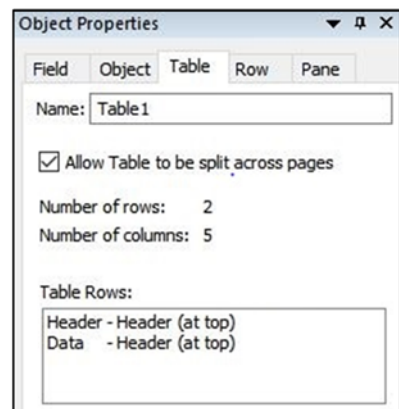
Now, you'll set properties for the table and each of its rows that tell DocOrigin Merge the conditions that can cause a page break in the document.

To designate that the table may be split in order to accommodate all the line items in the data stream:

6. Select the table.
7. In the Object Properties windows, click the **Table** tab.
8. Check **Allow Table to be split across pages**.

Note in the **Table Rows** section how the Header and Data rows are designated.

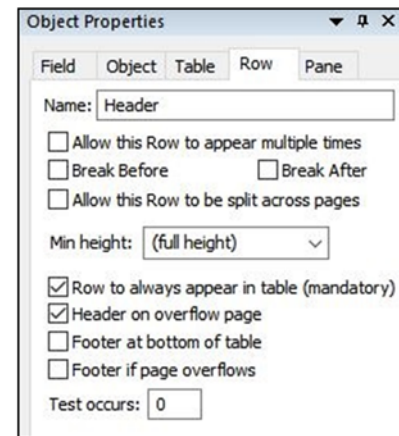
Table Tab



To specify that the header row will appear at the top of the table on the first page of the document, and on any overflow pages:

1. Select the header row.
2. In the Object Properties window, click the **Row** tab.
3. Check the properties, as shown in the graphic:
 - **Row to always appear in table (mandatory)** – the row will always appear on page 1 of the document.
 - **Header on overflow page** – the row will appear as a header for the table on every overflow page.
4. Uncheck any other properties.

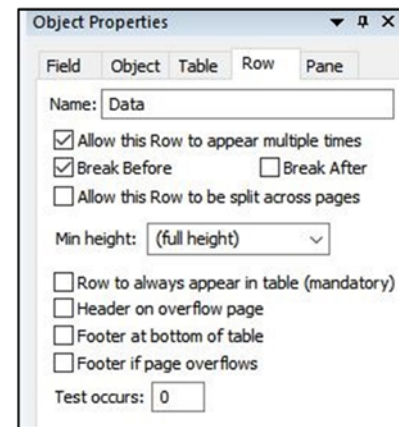
Row Tab – Header Row



To specify that the line item row is repeating, and to specify when a page break can occur:

1. Select the line item row.
2. In the Object Properties window, on the **Row** tab, set the properties as shown in the graphic:
 - **Allow this Row to appear multiple times:** specifies that the row can repeat as many times as necessary to output all the available data in the data stream.
 - **Break Before:** an overflow page is triggered before the current row of data is output (that is, there is not enough space on the current page for the row).
3. Uncheck any other properties.

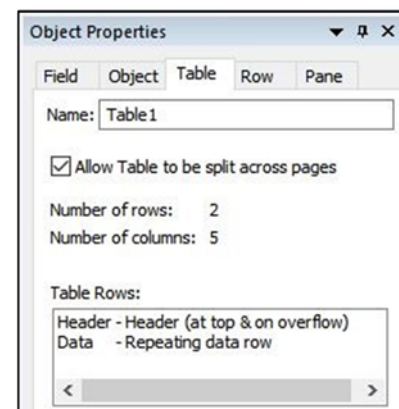
Row Tab - Line Item Row



Now that you've set the properties for the header and line item rows, look at the table properties again.

4. Click the **Table** tab. The **Table Rows** area has been updated to reflect the properties associated with each of the rows.
5. Deselect the table, and save your layout.

Table Tab



Create the Invoice Totals

The totals area for the table will be placed in a separate pane, so that it will occur once per document following the line items.

To create the pane for the table totals:

1. Select "TableHdrItems" in the Form Explorer.
2. On the layout area, right click to display the menu, and click **Insert Pane > Insert Pane After** to add a new pane to the layout.
3. In the Form Explorer, rename the new pane to "TableTotals".

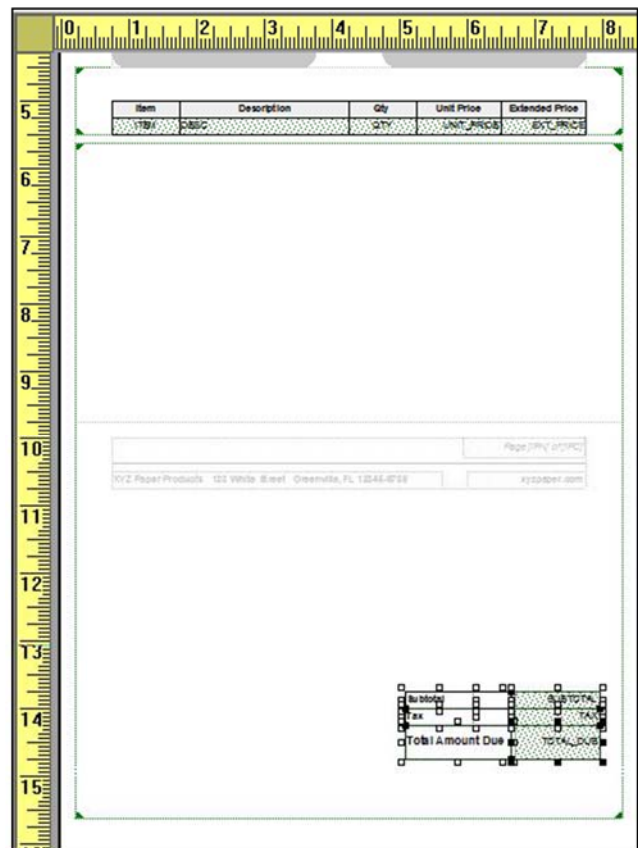
To copy the totals area from the static layout to your dynamic layout:

4. **On the static layout**, lasso the objects in the totals area and copy them to the Clipboard.
5. **On the dynamic layout**, in the Form Explorer, select "TableTotals".
6. In the **Common Properties** window, set **Height** to 10.0".

Remember that DocOrigin Design copies the "relative" coordinates of the objects' positions with the objects, as described on page 42. When you paste the objects into a pane, the coordinates associated with the object's position are relative to the top-left corner of the pane. Since the totals area is near the bottom of the page on the static layout, adjusting the height of the pane ensures there is enough vertical space to paste the objects.

7. Paste the objects into the pane.

Your layout should look similar to the graphic on the right.



8. Position the top right corner of the totals objects at the 7.75" increment on the horizontal Ruler and the 6" increment on the vertical Ruler.

9. Select "TableTotals" in the Form Explorer.
10. Decrease the size of the pane so that the bottom edge is below the totals area.
11. Save the layout.

Now your layout should look similar to this:

| Item | Description | Qty | Unit Price | Extended Price |
|------|-------------|-----|------------|----------------|
| ITEM | DESC | QTY | UNIT_PRICE | EXT_PRICE |

| | |
|------------------|-----------|
| Subtotal | SUBTOTAL |
| Tax | TAX |
| Total Amount Due | TOTAL_DUE |

Set Properties for the Pane

12. To specify that DocOrigin Merge can execute a page break in the event that there is not enough space to place the totals objects on the current page of the document.
13. In the Object Properties window, click the **Pane** tab.
14. Check **Allow Break Before**.
15. Uncheck any other properties.
16. Deselect the pane, and save your layout.

Get Started on the Overflow Page

You will recall that page 2 of the layout is the overflow page that will be activated when page 1 is full and there are more line items in the data stream to be output. This page has a different header and footer than page 1 to maximize the space available for the document content.

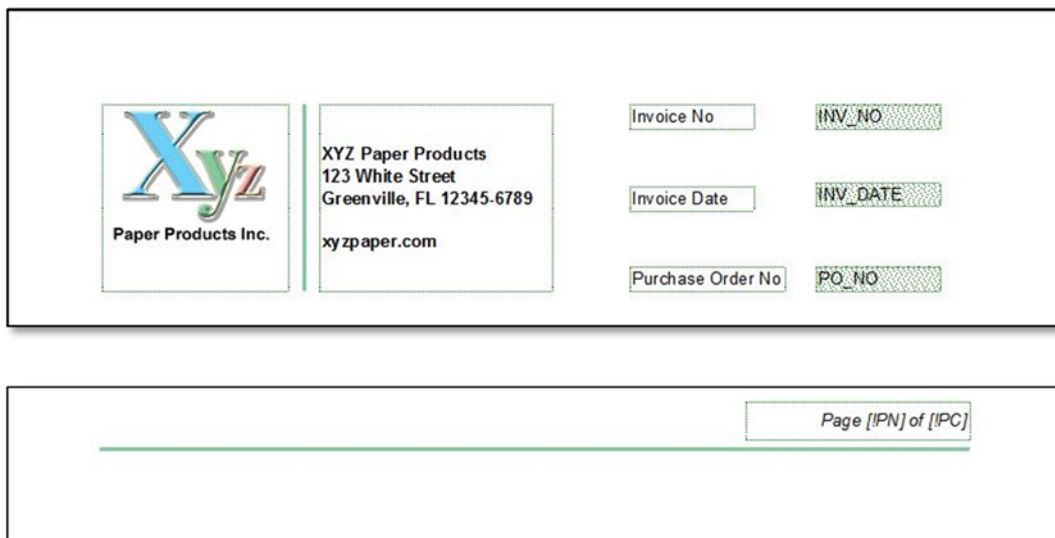
To begin the layout process for "Page2", you'll perform two quick tasks:

- delete the pane. The overflow page only requires a container object. When a page overflow occurs, DocOrigin Merge continues to output the data for the currently active pane (from page 1) into the container on the overflow page.
 - size the container to maximize the vertical space for the document content.
1. In the Form Explorer, select "Pane2", and press DELETE.
 2. **Zoom out** to view the entire page.

3. Click on the container icon in the Form Explorer:
 - Drag the top of the container down to the 2.75" increment on the vertical Ruler.
 - Drag the bottom of the container up to the 9.5" increment on the vertical Ruler.
4. Deselect the object, and save your layout.

Create the Page Header and Footer

Next, you'll create the static header and footer for the page. You'll copy the page footer, and a portion of the page header from "Page1", and then modify these areas. To toggle between pages, click the appropriate page icon in the Form Explorer. When you are finished, the page header and footer will look like this:



First, you'll create the footer for "Page2":

1. **On "Page1"**, ensure the Static Objects layer is active. If it is not active, click on the icon for "PageFtrGrp".



To activate a layer, in the Form Explorer click an icon on the desired layer, or use the **View** menu commands.

2. Copy the group of objects to the Clipboard.
3. **On "Page2"**, paste the group.

In order to use the company address and web address in the header, you'll remove the group to make the footer objects independent of one another.

4. Right-click on the footer, and on the menu, click **Unlink Group**.
5. Lasso the line and the text label for the page numbering. Position the line at the 0.75" increment on the horizontal Ruler and the 10.25" increment on the vertical Ruler.
6. Deselect the objects, and save your layout.

To create the header for "Page2":

7. On "Page1", lasso the logo, and the 3 text labels and fields for the Invoice No, Invoice Date and Purchase Order No.
8. Copy the objects to the Clipboard.



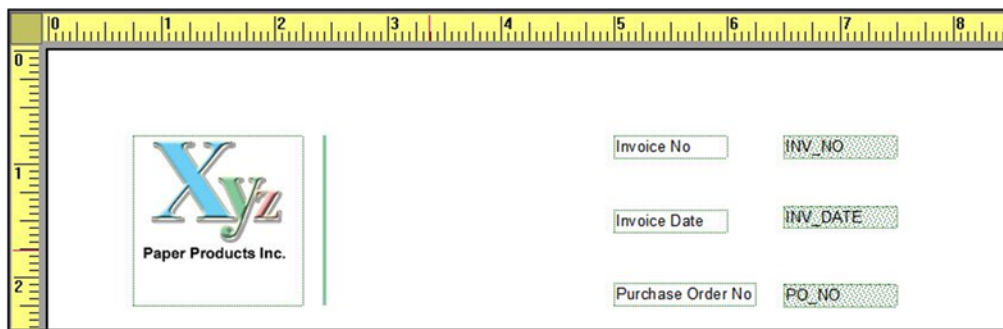
On "Page1", you set the Global property for the INV_NO, INV_DATE and PO_NO fields. Since the copy function saves all the properties for each object, it is not necessary to set this property on "Page2". However, when you copy/paste objects across pages before setting all the appropriate properties, you will have to set the properties for identical objects separately on each page.

9. On "Page2", paste the objects onto the page.

Note that the objects are placed onto "Page2" such that the top-left corner of the logo is at the top-left corner of the layout area rather than at the 0.75" increment on both Rulers. This is because the objects were linked into a group, and the coordinates that DocOrigin Design has copied with the objects is relative to the position of the top-left corner of the group.

10. Position the top-left corner of the logo at the 0.75" increment on the horizontal and vertical Rulers.
11. Select only the logo, and size the object so that it is 1.5" wide and 1.5" high.
12. Draw a vertical line the height of the logo and to the right of this object. In the Common Properties window:
 - On the **Color** tab, set a custom color with these values: Red = 130, Green = 202, and Blue = 156.
 - On the **Line/Edge** tab, set the **Line Width** to 0.03".
13. Deselect the object.

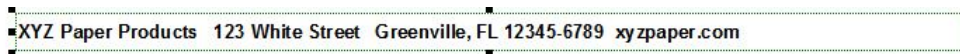
The top portion of your layout should look similar to this:



14. Scroll to the bottom of the page. Select the text labels for the company name and web address.
15. Drag the objects to the top of the layout.

16. To combine the two text labels into one label, click **Format > Combine Multiple Text Labels**.

DocOrigin Design merges the two text labels.



17. Toggle to typing mode, and insert line breaks in the name and address.

Leave a blank line above the web address.

18. Position the text label to the right of the vertical line, and size the text label to 1.5" high and to an appropriate width.



19. Deselect the object, and save your layout.

Now, the page header should look similar to this:

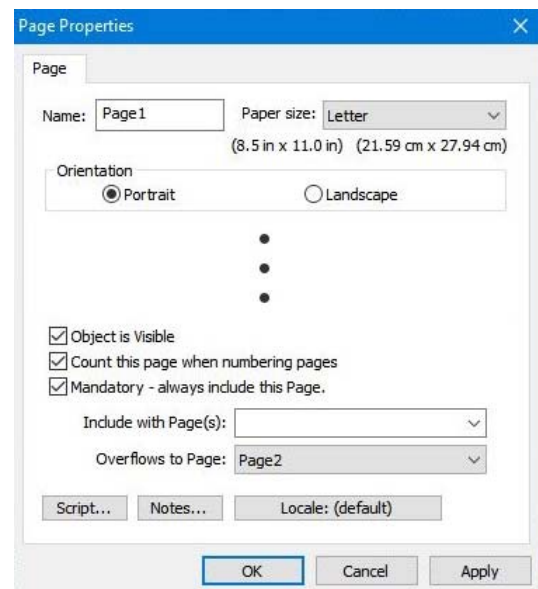


Set the Page Properties

The final step for creating the dynamic invoice layout is to set the properties for the pages.

1. Double-click "Page1" in the Form Explorer.
2. At the bottom of the **Format > Page Properties** dialog, by default, **Object is Visible** and **Count this page when numbering pages** are set. Set the following:
 - Check **Mandatory – always include this Page** – specifies that for each set of data in the data stream, that is, for every customer invoice, the document will include "Page1".
 - Set **Overflows to Page** to "Page2" – identifies the overflow page in the event that there is too much data for the current document to fit on "Page1".


There are no Page properties to set for "Page2".



Test the Dynamic Layout

Using varying numbers of line items, we recommend that you test the dynamic invoice layout to see how the document appears when all the content is on one page, the line items are on page 1 and the totals are on page 2, and the line items overflow onto additional pages.

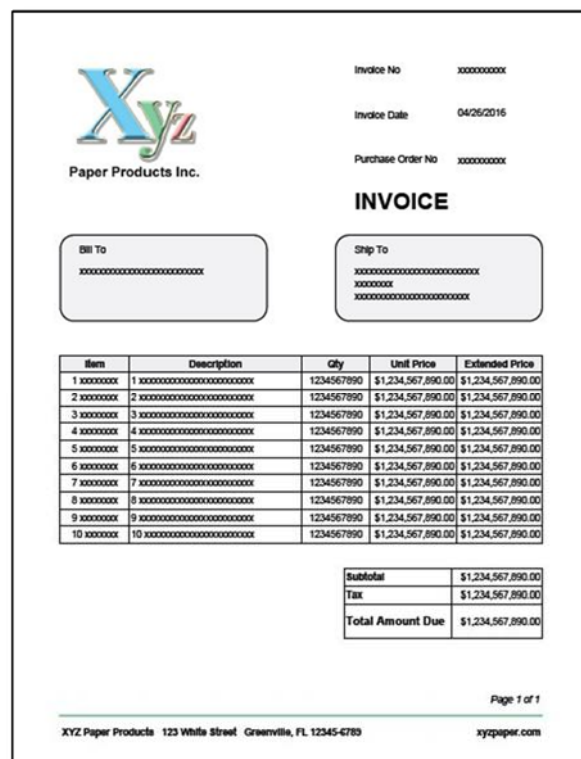
To automatically generate a data stream with a particular number of line items:

1. In the Form Explorer, click "Page1".
2. Under "Table1", click "Data".
3. In the Object Properties window, click the **Row** tab.
4. In **Test Occurs**, enter the number of line items.
5. Click the **PDF Preview** icon  on the Toolbar to view the resulting document.
6. Repeat the preview with several different numbers of line items.

In the event that you receive a message indicating there are errors in the log file, open the file and view the content. Likely, you have an issue with the property settings. Review the error and ensure all the properties are set as specified in this lesson. Make the appropriate corrections and try again.

Below are the results of generating invoices using 10 and 20 line items respectively.

Dynamic Invoice with 10 Line Items



The image shows a dynamic invoice layout for XYZ Paper Products Inc. The invoice includes a logo, company name, and contact information. It features a table with 10 line items, each with a description, quantity, unit price, and extended price. The subtotal, tax, and total amount due are also displayed.

XYZ
Paper Products Inc.

Invoice No: xxxxxxxx
Invoice Date: 04/26/2016
Purchase Order No: xxxxxxxx

INVOICE

Bill To: xxxxxxxxxxxxxxxxxxxxxxxxxxxx
Ship To: xxxxxxxxxxxxxxxxxxxxxxxxxxxx

| Item | Description | Qty | Unit Price | Extended Price |
|-------------|---------------------------------|------------|--------------------|--------------------|
| 1 xxxxxxxx | 1 xxxxxxxxxxxxxxxxxxxxxxxxxxxx | 1234567890 | \$1,234,567,890.00 | \$1,234,567,890.00 |
| 2 xxxxxxxx | 2 xxxxxxxxxxxxxxxxxxxxxxxxxxxx | 1234567890 | \$1,234,567,890.00 | \$1,234,567,890.00 |
| 3 xxxxxxxx | 3 xxxxxxxxxxxxxxxxxxxxxxxxxxxx | 1234567890 | \$1,234,567,890.00 | \$1,234,567,890.00 |
| 4 xxxxxxxx | 4 xxxxxxxxxxxxxxxxxxxxxxxxxxxx | 1234567890 | \$1,234,567,890.00 | \$1,234,567,890.00 |
| 5 xxxxxxxx | 5 xxxxxxxxxxxxxxxxxxxxxxxxxxxx | 1234567890 | \$1,234,567,890.00 | \$1,234,567,890.00 |
| 6 xxxxxxxx | 6 xxxxxxxxxxxxxxxxxxxxxxxxxxxx | 1234567890 | \$1,234,567,890.00 | \$1,234,567,890.00 |
| 7 xxxxxxxx | 7 xxxxxxxxxxxxxxxxxxxxxxxxxxxx | 1234567890 | \$1,234,567,890.00 | \$1,234,567,890.00 |
| 8 xxxxxxxx | 8 xxxxxxxxxxxxxxxxxxxxxxxxxxxx | 1234567890 | \$1,234,567,890.00 | \$1,234,567,890.00 |
| 9 xxxxxxxx | 9 xxxxxxxxxxxxxxxxxxxxxxxxxxxx | 1234567890 | \$1,234,567,890.00 | \$1,234,567,890.00 |
| 10 xxxxxxxx | 10 xxxxxxxxxxxxxxxxxxxxxxxxxxxx | 1234567890 | \$1,234,567,890.00 | \$1,234,567,890.00 |

| | |
|------------------|--------------------|
| Subtotal | \$1,234,567,890.00 |
| Tax | \$1,234,567,890.00 |
| Total Amount Due | \$1,234,567,890.00 |


Page 1 of 1

XYZ Paper Products 123 White Street Greenville, FL 12345-6789 xyzpaper.com

Dynamic Invoice with 20 Line Items

Page 1

Page 2



Paper Products Inc.

Invoice No xxxxxxxxxx
 Invoice Date 04/26/2016
 Purchase Order No xxxxxxxxxx

INVOICE


Bill To
 xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

Ship To
 xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
 xxxxxxxx
 xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

| Item | Description | Qty | Unit Price | Extended Price |
|-------------|-------------------------------------|------------|--------------------|--------------------|
| 1 xxxxxxxx | 1 xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx | 1234567890 | \$1,234,567,890.00 | \$1,234,567,890.00 |
| 2 xxxxxxxx | 2 xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx | 1234567890 | \$1,234,567,890.00 | \$1,234,567,890.00 |
| 3 xxxxxxxx | 3 xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx | 1234567890 | \$1,234,567,890.00 | \$1,234,567,890.00 |
| 4 xxxxxxxx | 4 xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx | 1234567890 | \$1,234,567,890.00 | \$1,234,567,890.00 |
| 5 xxxxxxxx | 5 xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx | 1234567890 | \$1,234,567,890.00 | \$1,234,567,890.00 |
| 6 xxxxxxxx | 6 xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx | 1234567890 | \$1,234,567,890.00 | \$1,234,567,890.00 |
| 7 xxxxxxxx | 7 xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx | 1234567890 | \$1,234,567,890.00 | \$1,234,567,890.00 |
| 8 xxxxxxxx | 8 xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx | 1234567890 | \$1,234,567,890.00 | \$1,234,567,890.00 |
| 9 xxxxxxxx | 9 xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx | 1234567890 | \$1,234,567,890.00 | \$1,234,567,890.00 |
| 10 xxxxxxxx | 10 xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx | 1234567890 | \$1,234,567,890.00 | \$1,234,567,890.00 |
| 11 xxxxxxxx | 11 xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx | 1234567890 | \$1,234,567,890.00 | \$1,234,567,890.00 |
| 12 xxxxxxxx | 12 xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx | 1234567890 | \$1,234,567,890.00 | \$1,234,567,890.00 |
| 13 xxxxxxxx | 13 xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx | 1234567890 | \$1,234,567,890.00 | \$1,234,567,890.00 |
| 14 xxxxxxxx | 14 xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx | 1234567890 | \$1,234,567,890.00 | \$1,234,567,890.00 |
| 15 xxxxxxxx | 15 xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx | 1234567890 | \$1,234,567,890.00 | \$1,234,567,890.00 |
| 16 xxxxxxxx | 16 xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx | 1234567890 | \$1,234,567,890.00 | \$1,234,567,890.00 |
| 17 xxxxxxxx | 17 xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx | 1234567890 | \$1,234,567,890.00 | \$1,234,567,890.00 |

Page 1 of 2

XYZ Paper Products 123 White Street Greenville, FL 12345-6789 xyzpaper.com



Paper Products Inc.
 xyzpaper.com

XYZ Paper Products
 123 White Street
 Greenville, FL 12345-6789

Invoice No xxxxxxxxxx
 Invoice Date 04/26/2016
 Purchase Order No xxxxxxxxxx

| Item | Description | Qty | Unit Price | Extended Price |
|-------------|-------------------------------------|------------|--------------------|--------------------|
| 18 xxxxxxxx | 18 xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx | 1234567890 | \$1,234,567,890.00 | \$1,234,567,890.00 |
| 19 xxxxxxxx | 19 xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx | 1234567890 | \$1,234,567,890.00 | \$1,234,567,890.00 |
| 20 xxxxxxxx | 20 xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx | 1234567890 | \$1,234,567,890.00 | \$1,234,567,890.00 |

| | |
|-------------------------|---------------------------|
| Subtotal | \$1,234,567,890.00 |
| Tax | \$1,234,567,890.00 |
| Total Amount Due | \$1,234,567,890.00 |

Page 2 of 2

What's Next?

With your new knowledge of DocOrigin Design, we hope you are ready to start on another document layout. We suggest that you review some of the sample layouts that accompany DocOrigin Design; these may assist you by demonstrating a particular task that you are trying to accomplish. As well, there is additional documentation about DocOrigin on our web site at: www.docorigin.com.

Commands & Shortcuts

Use this list to enhance your experience with DocOrigin Design.

LAYOUT AREA

| | |
|--|--|
| Double-click on a Ruler | Access the Grids tab (Format > Form Properties dialog). |
| View > Fields are active View > Non-fields are active | Deactivate one set of objects to work with the other set. |
| Format > Default Settings | Set font, unit of measure, line width and paper size for new document layouts. |

ADD OBJECTS

| | |
|--------------------|---|
| Click | Add an object to the layout for the selected object tool. |
| ALT + Click | Add another occurrence of a selected object tool. |

ALIGN OBJECTS

| | |
|--|--|
| Format > Align to Object | Align selected objects to the handles of the last object selected. |
| Format > Align to Picked Extents | Align selected objects to the handles of the object that represents the command. Left aligns to the left-most object, Bottom to the bottom-most object, and so on. |

COPY & PASTE OBJECTS

| | |
|---|-------------------------|
| Edit > Copy or CTRL+C | Copy selected objects. |
| Edit > Paste or CTRL+V | Paste selected objects. |

DELETE OBJECTS

| | |
|--|--------------------------|
| Edit > Delete or DELETE key | Delete selected objects. |
|--|--------------------------|

DUPLICATE OBJECTS

| | |
|---|-----------------------------|
| Edit > Duplicate or CTRL+D | Duplicate selected objects. |
|---|-----------------------------|

FIND & REPLACE

| | |
|---|--|
| Edit > Find or CTRL+F | Access find/replace functionality for layout-specific objects. |
| Edit > Find Next or F3 | |
| Edit > Replace or CTRL+H | |

HTML PREVIEW

| | |
|----------------|------------------------------------|
| F7 | Preview the layout in HTML format. |
| CTRL+F7 | Display the HTML Preview dialog. |

MOVE OBJECTS

Format > Nudge 1 grid unit Move selected objects 1 grid unit. or use the arrow keys:

| | |
|------------------------------|----------------------------|
| Left – to move left | Up – to move up |
| Right – to move right | Down – to move down |

NAME OBJECTS

In Form Explorer:

| | |
|-----------|---------------------------|
| F2 | Rename a selected object. |
|-----------|---------------------------|

PDF PREVIEW

| | |
|----------------|-----------------------------------|
| F5 | Preview the layout in PDF format. |
| CTRL+F5 | Display the PDF Preview dialog. |

SELECT OBJECTS

On the layout:

| | |
|----------------------|---|
| Click | Select a single object. |
| SHIFT + Click | Select an object and deselect any currently selected object(s). |
| CTRL+Click | Select several objects. |
| Lasso | Select one or more objects. If possible, lasso from an area of white space on the page. |

In Form Explorer:

| | |
|----------------------|--|
| Click | Select a single object. |
| SHIFT + Click | Select objects that are listed consecutively. Use the shortcut to select the first and last objects. |
| CTRL+Click | Select specific objects. |

SIZE OBJECTS

| | |
|---|--|
| Format > Resize Objects | Resize selected objects to the last object selected for width, height or both. |
| Format > Resize Text Labels to Minimum | Resize selected text labels to the minimum width or height that accommodates the text. |
| Format > Nudge 1 grid unit or use the arrow keys: | Size selected objects by 1 grid unit. |
| CTRL+Left - to narrow | CTRL+Up - to decrease height |
| CTRL+Right -to widen | CTRL+Down -to increase height |

TOGGLE TEXT MODES

| | |
|------------|--|
| ESC | Switch between typing mode and select mode for a text label. |
|------------|--|