

Tables, Tables, Tables

The Document Generation Word Add-in lets you quickly build templates that can turn your data into Word or PDF documents. You can easily insert tags and put together basic templates with just the Add-in. For a walkthrough on how to use the add-in, check out the <u>Add-in Demo</u>.



But, instead of using the Add-in, I prefer to add tags manually. The Add-in is suitable for only elementary templates that don't use complicated logic. This is particularly true when creating tables. A table can be made from a JSON array within your data or from a JSONata expression that returns an array. Many tables require calculations within the rows or the ability to filter the data based on a particular piece of data. Manual tagging is necessary for these functions. The following examples show the various methods of creating tables.

Examples:

See: tables-tables.json for field reference.

Referencing the Array:

When you add a table to a template using the Add-in, the tags can only reference an array in the JSON data. The "Price" column is blank because you can't perform calculations when a table is created this way.

	SKU	Product Name	Color	Unit Price	Price
2	0406654608	Vintage Pocket Watch	Purple	34.45	
1	0406634348	Leather Satchel	Orange	21.67	
1	0406654611	Pocket Watch Chain	Orange	45.25	
2	0406654612	Leather Gloves	Black	38.9	
1	0406654613	Brass Key	Orange	28.75	
3	0406654614	Silk Handkerchief	White	32.5	
1	0406654615	Wooden Box	Brown	85	
1	0406654616	Crystal Paperweight	Purple	112.3	
2	0406654617	Leather Belt	Brown	55.75	
1	0406654618	Brass Compass	Orange	73.4	



Using Table Markers

You can also create tables using table markers; table-start and table-end. In the example below, we are seeding the table with the "products" array in the JSON data. Start by adding a 2-row table in Word. Be sure to set the top row as a header row and to repeat across pages. In the second row, add the table-start tag. It must be the first tag in the row that you want to be repeated, and the tag must reference an array in the JSON. As you will see in the following example, the array can be filtered. Then, the table-end tag must be the last one in the final column. This sets up the scope in which the JSONata functions can work. One row will be added for each item in the array.

As you can see in the last column, you can do table math when table markers are used. Also, the "Quantity" column is very narrow and hard to read, so I've put an example of the table-start tag just below. Because the tag is not within a table, it is ignored.

{% table-start products %}

	SKU	Product Name	Color	Unit Price	Price
2	0406654608	Vintage Pocket Watch	Purple	34.45	68.9
1	0406634348	Leather Satchel	Orange	21.67	21.67
1	0406654611	Pocket Watch Chain	Orange	45.25	45.25
2	0406654612	Leather Gloves	Black	38.9	77.8
1	0406654613	Brass Key	Orange	28.75	28.75
3	0406654614	Silk Handkerchief	White	32.5	97.5
1	0406654615	Wooden Box	Brown	85	85
1	0406654616	Crystal Paperweight	Purple	112.3	112.3
2	0406654617	Leather Belt	Brown	55.75	111.5
1	0406654618	Brass Compass	Orange	73.4	73.4

Using Table Markers with Array Filtering

To filter the data that will generate the table, use a JSONata expression. In the example below, we are filtering the products array based on the value of the color.

{% table-start products[description.color = 'Orange' or description.color = 'White'] %}

	SKU	Product Name	Color	Unit Price	Price
1	0406634348	Leather Satchel	Orange	21.67	21.67
1	0406654611	Pocket Watch Chain	Orange	45.25	45.25
1	0406654613	Brass Key	Orange	28.75	28.75
3	0406654614	Silk Handkerchief	White	32.5	97.5
1	0406654618	Brass Compass	Orange	73.4	73.4

Using Table Markers and Discarding Rows

Instead of filtering the data, a row can be discarded using the discard-row-if feature of Document Generation. When the condition in the discard-row-if(expr(condition)) returns true, the row is not added to the table. In the example below, we are displaying only the purple products. Notice that the discard-row-if directive can be in any column.

{% table-start products %}

	SKU	Product Name	Color	Unit Price	Price
2	0406654608	Vintage Pocket Watch	Purple	34.45	68.9
1	0406654616	Crystal Paperweight	Purple	112.3	112.3