20.0.0 Windward Tags Reference

This article introduces the Windward Tags used in Report Designer. It includes a brief description of each Tag, as well as some tips about using Tags: inserting, deleting, naming and more.

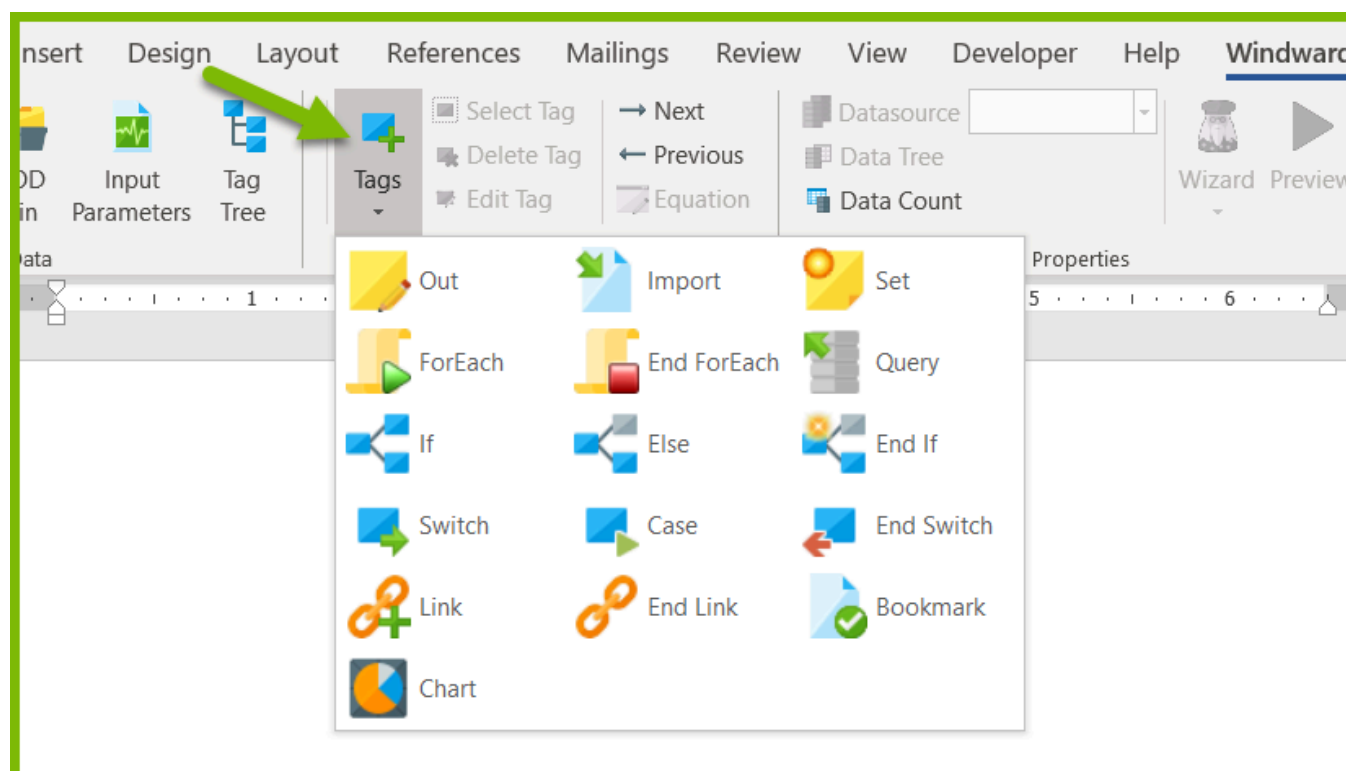There are also links to specific Tag reference articles.

What Are Windward Tags?

A Tag essentially performs these actions: When the report template's output is generated, go to the data source, find the data that I tell you should be in the output, and insert that information in the output in the place where I tell you. In broad terms the Tag knows what data to insert based on the way it is defined, and where to put the data based on its location in the report template.

 In programming terms, a Tag is simply a query executed against a database or other data source.

 The Tags will appear as a button in the Windward tab in your Office product command ribbon. See the Report Designer User Interface Reference for more information.

For example, below we see the "Tags" button in the Windward tab in Word's command ribbon.

The Tags

Tag Colors

Once you start associating data with your Tags, they no longer show their Tag-type name (e.g. "Out" Tag); instead they show part of the name of the data you associated, such as "Customers." To help you see a Tag's type with a glance, each Tag has an assigned color, which are noted below.

Stand-alone Tags

Some Tags are used by themselves; for example an Out Tag can be used to display one image, and an Import Tag can insert a sub-template into a report template's output.

Combining Tags with a Tag such as the ForEach Tag gives you a great deal of control over your report template's output.

Paired and Grouped Tags

Some Tags are composite Tags with a beginning and an ending Tag. Like a car, you have to turn it on to use it, and you have to remember to turn it off.

Some of these Tags must be used in conjunction with other related Tags in order to do anything. They may also require the incorporation of stand-alone Tags.

Brief Tag Introduction

Tag Type	Tag Color	Stand-alone Tag?	Uses
Out	Blue	Yes	• The most commonly used Tag. After inserting an Out Tag, it can be assigned to pull one piece of data from the data source. This can be a piece of text, an image, a URL, dates, times, and more. • When used in conjunction with a ForEach Tag, it will pull one piece of data for each row/node returned by the ForEach Tag. • They can be used in conjunction with other tags for more creative and powerful report templates.

Tag Type	Tag Color	Stand-alone Tag?	Uses
Import	Purple	Yes	• After inserting an Import Tag, it can be assigned to pull one piece of data from some place which is NOT in your data source (such as an image on your desktop, a legal document in your network files, a URL, or any other location that is not in your database). This can be a piece of text, an image, a sub-document, a URL, dates, times, and more. • They can be used in conjunction with other tags for more creative and powerful templates.
Set	Chartreuse	No	• Normally, you might only need one or two Set Tags per document. • The Set Tag is used to create a variable to limit or change the results of your output which can be referenced later by other Tags. • It could be inserted and defined by itself, but it useless without other Tags.
ForEach, EndForEach	Orange	No	• These are the second most commonly used Tags, and are some of the most powerful Tags. • This Tag repeats through each node in a dataset that you define, just like a foreach statement in programming is used to iterate through an array or object collection. • Use these Tags to create an iterative loop that returns data for any Tag that is between the beginning and ending Tag. We often refer to it as a *ForEach Loop*. • Use these Tags with other Tags to create documents or reports such as a set of individualized invoices or billing statements, inventory lists for multiple departments • ForEach Loops can be nested within other ForEach Loops • These Tags must be used together.

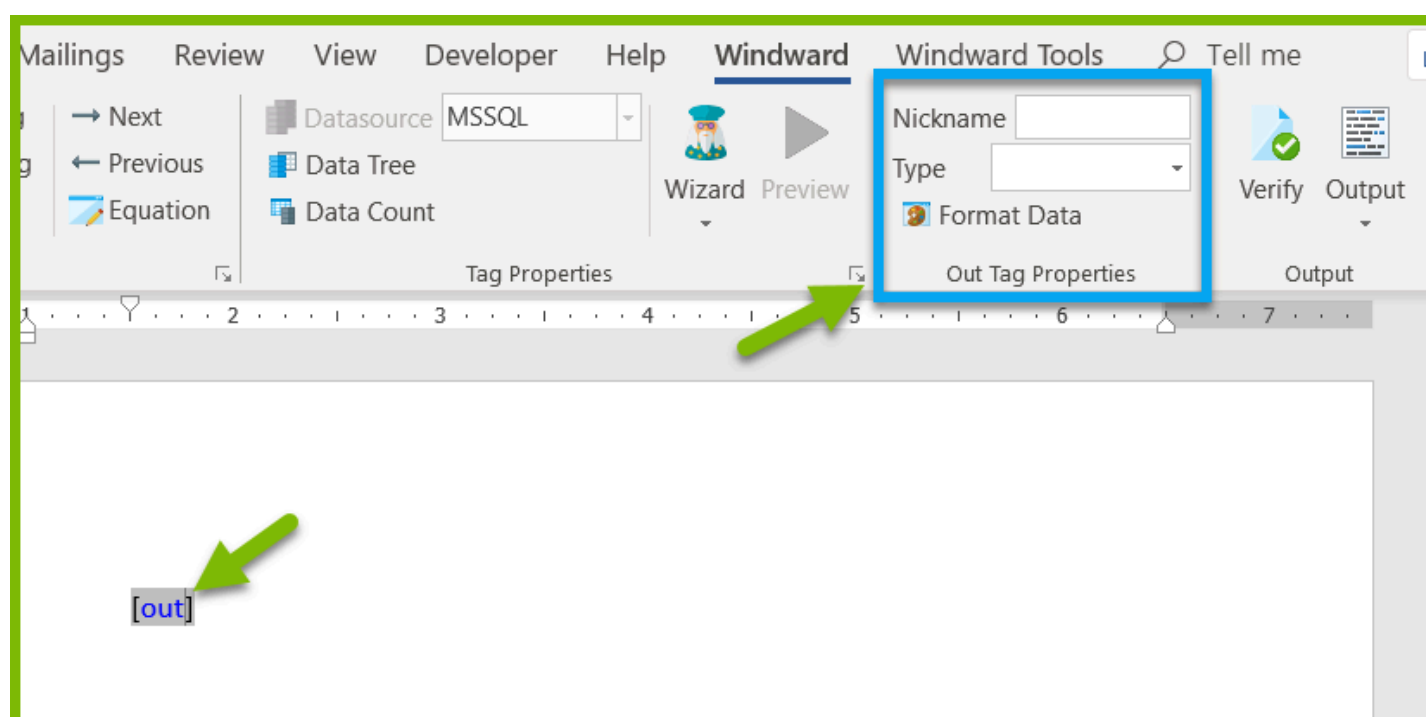| Tag Type	Tag Color	Stand-alone Tag?	Uses
Query	Fuscia	No	• This Tag saves system resources by reducing calls to large SQL Databases. Designed primarily to be used with SQL databases, Query Tags let you save the results of a query and then later refer to the data retrieved by that query without having to re-access the database. • When inserted at the beginning of a document, all the data returned by this Tag with will be available throughout the report template to all following Tags.

If, EndIf	Forest Green	No	• Use these Tags to create customized documents based on conditions that you set. In simple terms, the If Tag says, "If the condition is met, then perform a particular action."
			• Use these Tags to:
			  • Print data only for one set of data, such as "Belgian customers only."
			  • Keep lines from printing in an inventory sheet if they are over-stocked.
			  • In a set of legal forms, print sections for married couples, but do not print sections regarding children if the dataset for children is empty.
			• These Tags must be used together.
			• They can be used in conjunction with other Tags for more creative and powerful templates.

Else	Fluorescent Green	No	• Just like the If Tag, the Else Tag has two parts:
			  • Evaluating if a condition (set by the If Tag) isn't met.
			  • Determining what to do if the condition isn't met.
			• Use this Tag for ideas like creating a set of invoices where, if the amount is past due, a set of text that warns the customer of fines or other adverse actions is inserted.

Tag Type	Tag Color	Stand-alone Tag?	Uses
			• The Else Tag must be used between the If and EndIf Tags. • It can be used in conjunction with other Tags for more creative and powerful templates.
Switch, Case, EndSwitch	Brick Red, Crimson	No	• Use this Tag to create a set of conditions and actions such as printing employees from different departments in different colors, or inserting an image of a flag for every country in your report template. • These Tags must be used together. • They can be used in conjunction with other Tags for more creative and powerful templates.
Link, Endlink	Gold	No	• Use these Tags to create a clickable link in your final document, or to create a hyperlink to other places within the finished document. • These tags must be used together.
Bookmark	Blue	Yes	Use this tag to create clickable links to other sections within the finished document.
Chart	N/A	Yes	• This Tag lets you create a variety of charts: column, bar, line, pie, scatter, doughnut and bubble. • You can select a data set for the X and Y axes, and compare series on the same graph.

Using Windward Tags

Inserting Tags

Tag Nicknames

When you click on an inserted Tag, a "Tag Properties" section appears in the Windward ribbon. It's an easy way to give a Tag a nickname (which we strongly recommend). There are different options depending on the type of Tag. Tag properties are described in each Tag's reference article.

We recommend as a best practice that you give your Tags nicknames. There are a few reasons:

- Naming helps others to be able to understand what you're trying to accomplish with your report template.
- Naming helps you remember what you're trying to accomplish with a report template if it has been some time since you used it and you don't remember.
- Naming can make your template look cleaner. When you associate a large amount of data to a Tag, the appearance changes to show you everything that is associated with the Tag.

Editing Tags

See our Tag Editor article.

Copying and Pasting Tags

We discourage copying and pasting Tags as it can wreak havoc in your report. You can freely copy and paste a Tag that has no data associated with it, however, once you assign data to it, you must be careful to select the whole Tag (brackets and all) in order to move it and keep all the data intact.

Deleting a Tag

It is important to use the Delete Tag button in the Windward ribbon to ensure you have completely cleared the Tag's hidden code from your report template.

Where Can I Put Tags?

Tags can be added into the document body, headers, footers, footnotes, tables, and even into textboxes. But there are some limitations:

[Output Limitations](#)

[Excel Report Template Output Limitations](#)

Do Tags Appear In My Report Template Output?

Rest assured that your final report will not have bits of text that say "Set Tag" or "Query Tag" or "EndForEach." Instead, the Tag is replaced by the actual data you assign to it. For Tags like the Set Tag or Query Tag, they simply do not appear in the final document. See the example for Tags and Table/Cell Sizes below.

Do I Create a New Row or Line for the Data I Want to Appear?

When you create a Tagged document, you do not need to create a row or add new lines for all the data you anticipate to be returned when you generate output. Instead, Report Designer automatically adds a row or line for each item that you tell it to; when you assign a set of data to a ForEach Tag, it will create a row for each new piece of data that matches all the criteria that you set for it. (See the next example.)

Tags and Table Cell Sizes

Even if your report template looks too busy, or the cell height seems incorrect, the final output will have evenly spaced rows that accommodate the data you assigned to it.

Here, the Tags have taken up enough space in the cell (under Product Name) that an extra line was needed.

ProductName	ReorderLevel	UnitsInStock
[Products][ReorderIf] [ProductName] [:if][:forEach]	[ReorderLevel]	[UnitsInStock]

Upon output, the rows accommodate the actual text and number of rows of data that were selected.

Note that the all the Tags under the Product Name cell had no effect on the cell height, and that rows have been automatically added for each piece of data. In addition, there are no visible Tags in the final document.

ProductName	ReorderLevel	UnitsInStock
Chai	10	39
Chang	25	17
Aniseed Syrup	25	13
Chef Anton's Cajun Seasoning	0	53
Chef Anton's Gumbo Mix	0	0
Grandma's Boysenberry Spread	25	120
Uncle Bob's Organic Dried Pears	10	15
Northwoods Cranberry Sauce	0	6
Mishi Kobe Niku	0	29
Ikura	0	31
Queso Cabrales	30	22
Queso Manchego La Pastora	0	86
Konbu	5	24
Tofu	0	35
Genen Shouyu	5	39
Pavlova	10	29
Alice Mutton	0	0
Carnarvon Tigers	0	42
Singaporean Hokkien Fried Mee	0	26
Louisiana Hot Spiced Okra	20	4
Laughing Lumberjack Lager	10	52

What's next?

For more information about using Report Designer to Tag templates, try our [Beginner Training Course](#).