

PFA Advanced Function

This guide shows you how to use a data science model that has been saved in a PFA file in Yellowfin, by setting up an advanced function in the Report Builder.

Prerequisites

There is no need to set up a system for PFA. The main requirements are:

- A data science model stored in a PFA format. This could either be a JSON or a YAML file extension.
- [Installing](#) the PFA plug-in. (This can be downloaded from Yellowfin's [Marketplace](#).)

Instructions

Here's how to use Advanced functions to integrate a data science model via a PFA file into your platform.

1. Save your model in the PFA (.json/.yaml) format.
2. Build a Yellowfin report with data you wish to generate predictions for.
3. Drag in a new column that is of the same data type as the prediction to be generated. For example, if your model returns a categorical prediction such as gender, you would want to use a text dimension.
4. Within the column formatting drop-down, click Advanced Function.

Columns	Σ Sum Invoiced Amount	Currency Code
Rows		
	Sum Invoiced Amount	Currency
	\$34,399	EUR
	\$56,833	EUR
	\$77,466	EUR
	\$78,587	EUR
	\$280,578	EUR
	\$280,885	CAD
	\$450,224	CAD
	\$514,967	EUR
	\$667,457	CAD
	\$673,124	EUR
	\$762,463	EUR
	\$781,888	EUR
	\$817,253	CAD
		1.62
		1.13

5. Select the Statistical option from the drop-down and select the PFA option. Further configuration settings will appear on doing so.

Advanced Metrics

Advanced Function | Data Conversion

Save | Cancel

Invoiced Amount (Numeric) Σ # #! + % - ● ○ ○ ○ ○ ○ ○ ○ Display only in charts

Select Function: Statistical

- Moving Average
- Moving Total
- Naive Forecasting
- PFA (Numeric)**
- Polynomial Regression

PFA (Numeric)
Select a PFA File and click Load

Attribute	Setting	User Prompt
PFA File	<input type="text"/>	Complete path for PFA file
PFA File Type	<input checked="" type="radio"/> YAML <input type="radio"/> JSON	
Load PFA	<input checked="" type="radio"/> Reset <input type="radio"/> Load	

Step 1: Use "PFA (Numeric)" to convert to Numeric

6. Provide the full filepath or URL to the PFA file.
7. Specify the extension of the uploaded PFA file by choosing either the YAML or JSON option.

PFA File

PFA File Type YAML JSON

8. Then choose the Load option. If Yellowfin is able to load the specified file, detailed configuration options will appear.

Load PFA Reset Load

DOUBLE

Output Field

9. Match the input columns required by your model. These fields will be labeled as the name of the variable, but if no name is specified in the PFA file, then the variable type shows up, as shown in this example.

DOUBLE

10. Then select the output field.

Output Field

11. Click the Save button on the top-right corner of the advanced function window.

Advanced Metrics

Advanced Function Data Conversion

Save Cancel



12. **Note:** If there was a problem in processing the file, check that you have provided valid columns of the same data type required by the model, or look at the yellowfin.log file for a complete error description.