

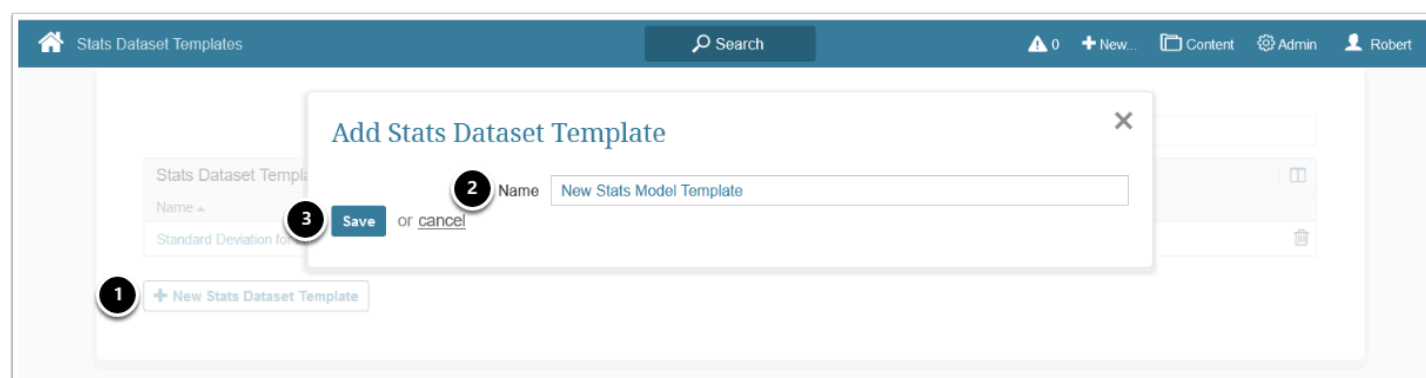
# Create a Statistical Model Template

Statistical Model Templates define how Stats Model data are processed. Users can create custom templates to run specific statistical calculations, based on the data anomalies that need to be surfaced. This article describes how to add a new Statistical Model Template to your Metric Insights instance.

NOTE: Writing the code for a Statistical Model Template is a technically advanced process. Please contact [support@metricinsights.com](mailto:support@metricinsights.com) for assistance with writing the correct code for a new template.

## 1. Create a New Stats Model Template

Access **Admin > System > Stats Model Templates**

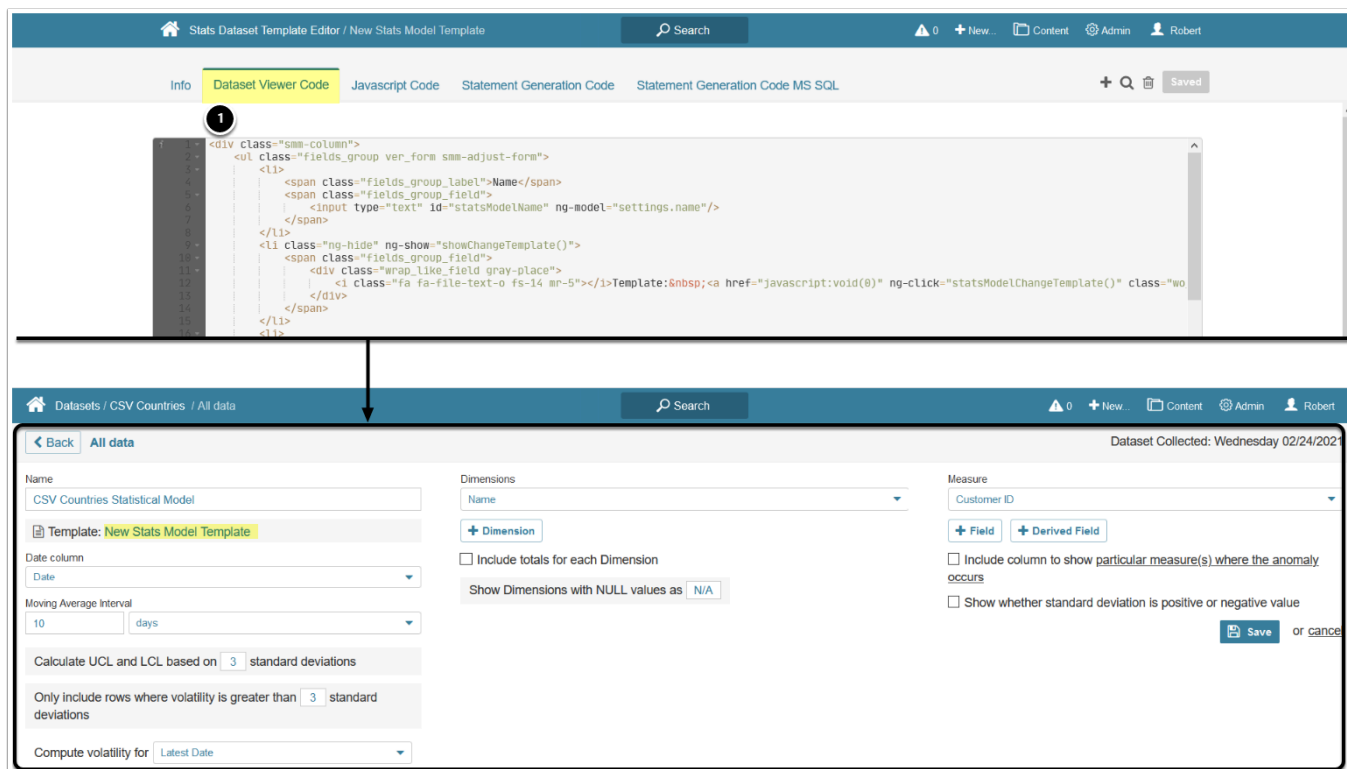


The list page containing all Stats Model Templates available in the system opens.

1. Below the grid, click **[+ New Stats Dataset Template]**
2. Enter a **Name** for the Stats Template
3. **[Save]**

## 2. Enter Dataset Viewer Code

Access the *Dataset Viewer Code* tab



### 1. Enter the HTML for the **Stats Model Editor**

- Once the Statistical Model Template is saved and selected in the **Stats Model Editor**, the menu is displayed based on this code

## 3. Enter Javascript Code

Access the *Javascript Code* tab

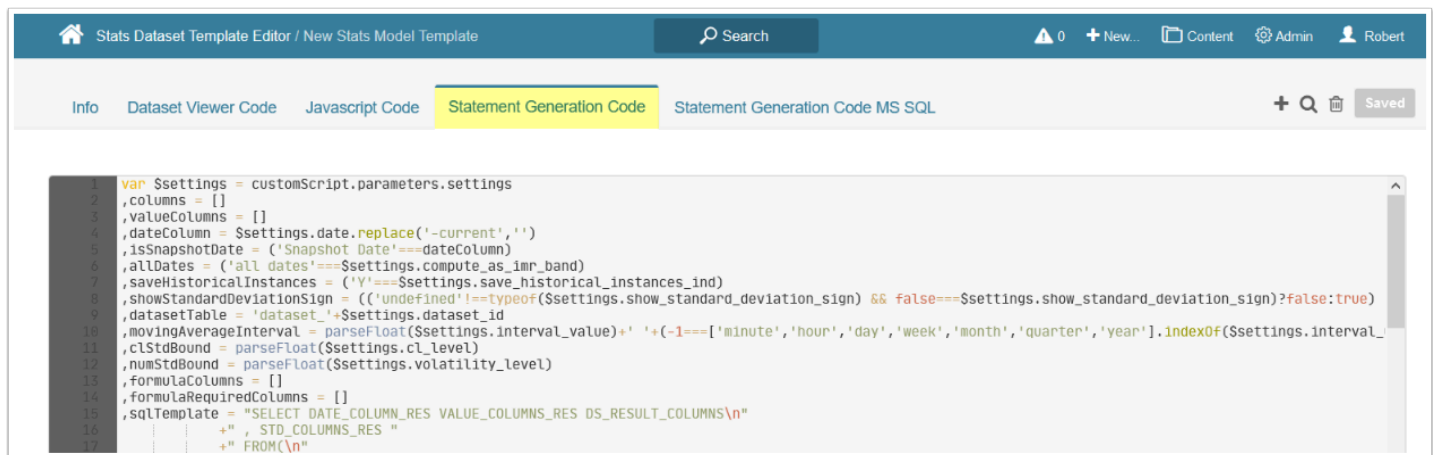


Enter the JavaScript code that is used to provide functionality for the HTML code entered in the previous step. This script processes the Dataset data to find any anomalies, which will serve as a basis for the future Stats Model.

## 4. Enter Statement Generation Code

### 4.1. Enter Code for MySQL

Access the *Statement Generation Code* tab




The screenshot shows the 'Stats Dataset Template Editor / New Stats Model Template' interface. The 'Statement Generation Code' tab is selected and highlighted in yellow. The code editor displays a JavaScript script for generating a MySQL query. The script defines various settings and constructs a SQL template string. The code is as follows:

```
1 var $settings = customScript.parameters.settings
2 ,columns = []
3 ,valueColumns = []
4 ,dateColumn = $settings.date.replace('-current','')
5 ,isSnapshotDate = ('Snapshot Date'===dateColumn)
6 ,allDates = ('all dates'=== $settings.compute_as_imr_band)
7 ,saveHistoricalInstances = ('Y'=== $settings.save_historical_instances_ind)
8 ,showStandardDeviationSign = (('undefined'!==typeof($settings.show_standard_deviation_sign) && false=== $settings.show_standard_deviation_sign)?false:true)
9 ,datasetTable = 'dataset.'+$settings.dataset_id
10 ,movingAverageInterval = parseFloat($settings.interval_value)+ ' +(-1===['minute','hour','day','week','month','quarter','year'].indexOf($settings.interval_
11 ,clStdBound = parseFloat($settings.cl_level)
12 ,numStdBound = parseFloat($settings.volatility_level)
13 ,formulaColumns = []
14 ,formulaRequiredColumns = []
15 ,sqlTemplate = "SELECT DATE_COLUMN_RES VALUE_COLUMNS_RES DS_RESULT_COLUMNS\n"
16     + " , STD_COLUMNS_RES "
17     + " FROM(\n"
```

Enter the code that will generate a MySQL query based on the data collected by the script.

### 4.2. Enter Code for MS SQL

Access the *Statement Generation Code MS SQL* tab



The screenshot shows the 'Stats Dataset Template Editor / New Stats Model Template' interface. The 'Statement Generation Code MS SQL' tab is selected and highlighted in yellow. The code editor displays a JavaScript script for generating a MS SQL query. The script defines various settings and constructs a SQL template string. The code is as follows:

```
1 var $settings = customScript.parameters.settings
2 ,columns = []
3 ,valueColumns = []
4 ,dateColumn = $settings.date.replace('-current','')
5 ,isSnapshotDate = ('Snapshot Date'===dateColumn)
6 ,allDates = ('all dates'=== $settings.compute_as_imr_band)
7 ,saveHistoricalInstances = ('Y'=== $settings.save_historical_instances_ind)
8 ,showStandardDeviationSign = (('undefined'!==typeof($settings.show_standard_deviation_sign) && false=== $settings.show_standard_deviation_sign)?false:true)
9 ,datasetTable = 'dataset.'+$settings.dataset_id
10 ,movingAverageInterval = (-1===['minute','hour','day','week','month','quarter','year'].indexOf($settings.interval_unit)?'day':$settings.interval_unit)+','
11 ,clStdBound = parseFloat($settings.cl_level)
12 ,numStdBound = parseFloat($settings.volatility_level)
13 ,formulaColumns = []
14 ,formulaRequiredColumns = []
15 ,sqlTemplate = "SELECT DATE_COLUMN_RES VALUE_COLUMNS_RES DS_RESULT_COLUMNS\n"
16     + " , STD_COLUMNS_RES "
17     + " FROM(\n"
```

1. Enter the code that will generate a MS SQL query based on the data collected by the script
2. **[Save]**

## 5. Use the Stats Model Template

Access the **Dataset Viewer** of a Dataset, on which you want to build a Stats Model

The first screenshot shows the 'Dataset Viewer' for 'CSV Countries / All data'. The 'Actions' menu is open, and 'Build Stats Model' is highlighted with a circled '1'. The second screenshot shows the 'Build Stats Model' configuration page. The 'Template' field is highlighted with a circled '2', and the 'New Stats Model Template' option is highlighted with a circled '3' in a 'Select Template' dialog box.

1. Select **Actions** > **Build Stats Model**
2. Click on the **Template** field
3. Select the created Stats Model Template

 For more details on creating a Stats Model, see [Create a Statistical Model \(Datasets\)](#).