



SOAP Integration - 1

SOAP (Simple Object Access Protocol) can be used to import data (actual values) from Web Services that have been published by companies or organisations that want to provide useful information. A Web service can be an internally or externally provided service.

In the example below, we will be using a 'open' web service provided by Spider Strategies for demonstration purposes. The service publishes monthly Social Media information for a fictitious company including

- Number of Facebook Views
- Number of Twitter Mentions
- Number of Article Mentions
- Number of Google Searches

First, create the Measures in a scorecard, in the example below we have created two measures under Social Media (SOAP Import)

The screenshot displays the IntraFocus interface for a scorecard titled "Social Media(SOAP Import)". The left sidebar shows a tree view of sections, with "Social Media(SOAP Import)" selected. The main content area shows the scorecard details, including a performance gauge, a historical performance chart, and a table of data used in calculations. A red arrow points to the "Facebook Views (SOAP)" measure in the sidebar.

DATA USED IN CALCULATIONS	SCORE	WEIGHT
Facebook Views (SOAP)		50%
Twitter Mentions (SOAP)		50%

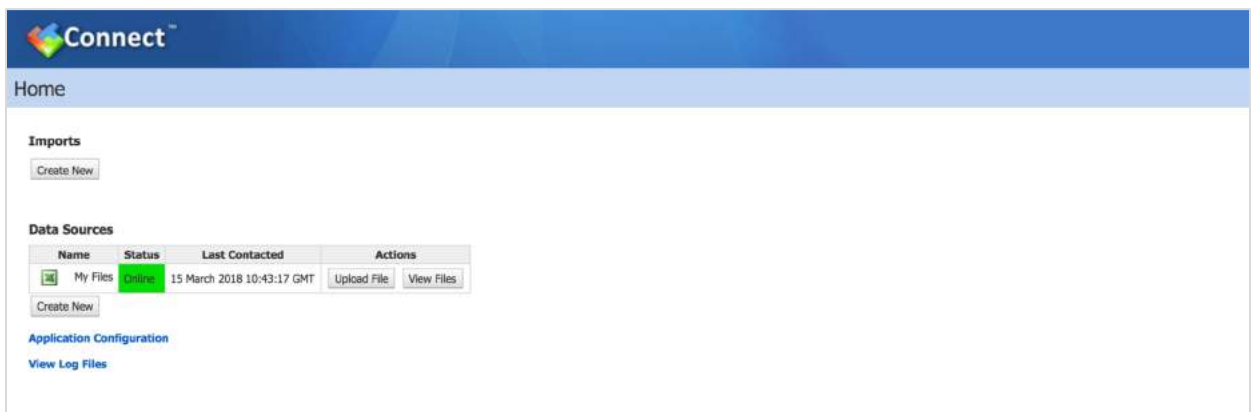


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Next, open the 'Connect' application in a new browser window. Connect is the free integration module that comes with the product. To reach it type in your usual url and add '/connect'. It should look something like this:

<https://intrafocus-v3-trial.qs.spiderstrategies.com/connect>

Sign into Connect using your usual Username and Password, you will see a screen like this:



The SOAP service we will use as an example has the following parameters:

SOAP URL: <https://datasource.balancedscorecards.com/socialSentiment>

WSDL URL: <https://datasource.balancedscorecards.com/socialSentiment.wsdl>

SOAP Request (body):

```
<socialSentimentRequest />
```

Data Element XPath: `//socialSentimentItem`

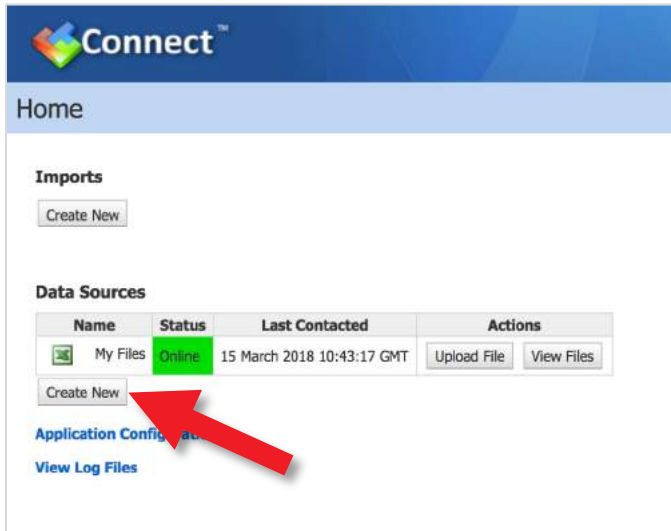
Metric ID/Name XPath: `//itemType`

Value XPath: `//value`

Date XPath: `//date`



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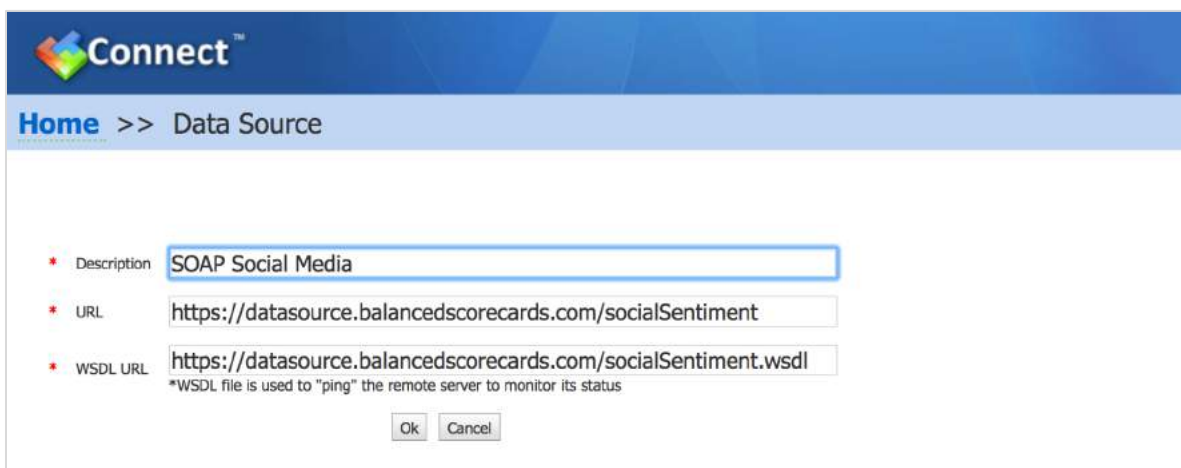
Create the Data Source

The data source needs to be defined. Click on the **Create New** button under the Data Sources heading.



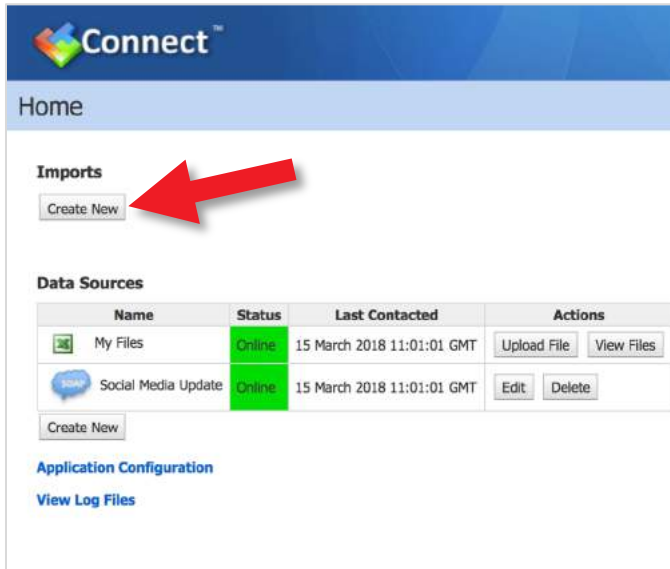
Select **SOAP Web Service** from the drop-down list of data sources and click Next.

Add a description, the SOAP url and the WSDL url as shown below and click **Ok**.





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Map the Data from the Source

The data source has now been linked to the application.

Next a Web service call has to be made to retrieve the data and the data mapped to the Measures previously created.

Click on **Create New** under Imports.

The **Edit Import** screen will appear

There are five steps required to import and map the data. This is a one-off activity. Once the data is mapped and an update scheduled, the update will automatically take place based on the schedule set.

Click on **Basic Information**





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Give the update a name, in this case **Social Media Update** and from the Data Source drop-down select the data source you have just created, in this case **SOAP Social Media**:

The screenshot shows a web application window titled "Home >> Edit Import >> Social Media Update >> Basic Information". The window has "Ok" and "Cancel" buttons in the top right corner. A red arrow points to the "Ok" button. The main content area contains a form with the following fields:

- Name:** A text input field with a dropdown menu open showing "Excel or CSV Upload" and "My Files".
- Data Source:** A dropdown menu with "SOAP Social Media" selected and marked with a checkmark.
- Import Type:** A dropdown menu with "Update Metric Values" selected.

Click on OK on the top right hand side of the screen.

The following screen will appear indicating that the 'Basic Information' step is complete.

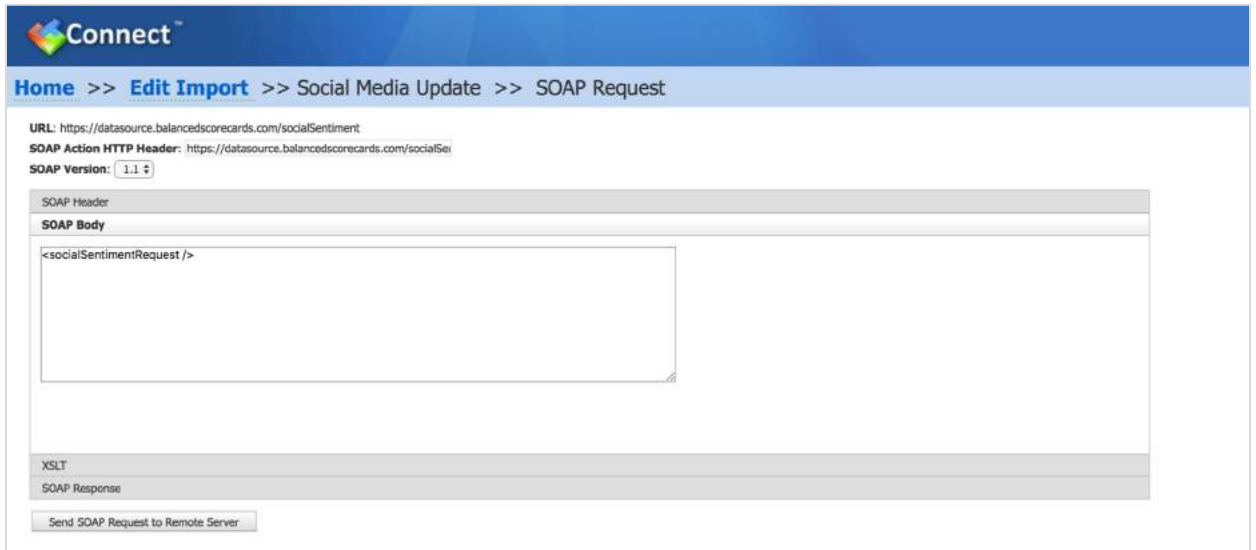
Click on the **Source Data** button

The screenshot shows a web application window titled "Home >> Edit Import >> Social Media Update". The window has a blue header with the "Connect" logo. The main content area contains five buttons: "Basic Information" (highlighted in blue), "Source Data" (with a red arrow pointing to it), "Destination Metrics", "Mapping", and "Schedule". At the bottom left, there is a "Details" link with a right-pointing arrow.

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The SOAP request form will appear. Add the SOAP url again into the field **SOAP Action HTTP Header**.

Add the SOAP request: `<socialSentimentRequest />` into the **SOAP Body** section as shown below.



Connect™

Home >> Edit Import >> Social Media Update >> SOAP Request

URL: <https://datasource.balancedscorecards.com/socialSentiment>

SOAP Action HTTP Header: <https://datasource.balancedscorecards.com/socialSei>

SOAP Version: 1.1

SOAP Header

SOAP Body

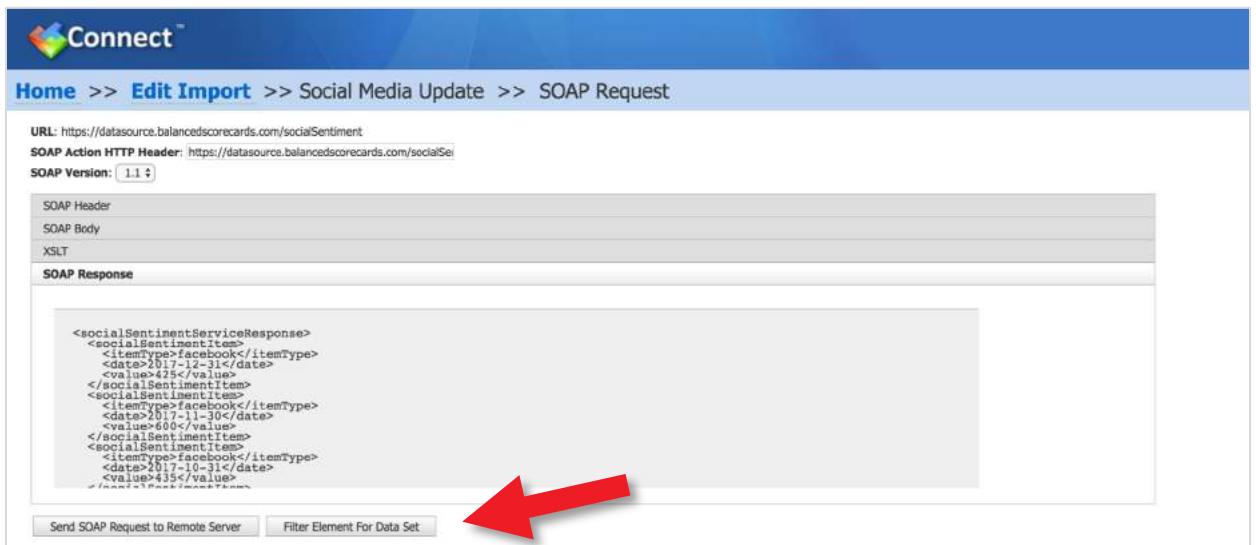
```
<socialSentimentRequest />
```

XSLT

SOAP Response

Send SOAP Request to Remote Server

Click on the grey bar called **SOAP Response**. A SOAP call will be made and the response will appear. This response needs to be filtered to obtain the correct data.



Connect™

Home >> Edit Import >> Social Media Update >> SOAP Request

URL: <https://datasource.balancedscorecards.com/socialSentiment>

SOAP Action HTTP Header: <https://datasource.balancedscorecards.com/socialSei>

SOAP Version: 1.1

SOAP Header

SOAP Body

XSLT

SOAP Response

```
<socialSentimentServiceResponse>
  <socialSentimentItem>
    <itemType>facebook</itemType>
    <date>2017-12-31</date>
    <value>425</value>
  </socialSentimentItem>
  <socialSentimentItem>
    <itemType>facebook</itemType>
    <date>2017-11-30</date>
    <value>600</value>
  </socialSentimentItem>
  <socialSentimentItem>
    <itemType>facebook</itemType>
    <date>2017-10-31</date>
    <value>425</value>
  </socialSentimentItem>
</socialSentimentServiceResponse>
```

Send SOAP Request to Remote Server

Filter Element For Data Set

Click the **Filter Element For Dataset** button

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Add //socialSentimentItem to the Data Element XPath field

The screenshot shows the 'Connect' interface with a breadcrumb trail: Home >> Edit Import >> Social Media Update >> SOAP Request. The main content area is titled 'SOAP Response' and contains XML data for 'socialSentimentServiceResponse'. A red arrow points to the 'Data Element XPath' field, which contains the value '//socialSentimentItem'.

```
<socialSentimentServiceResponse>
<socialSentimentItem>
  <itemType>facebook</itemType>
  <date>2017-12-31</date>
  <value>425</value>
</socialSentimentItem>
<socialSentimentItem>
  <itemType>facebook</itemType>
  <date>2017-11-30</date>
  <value>600</value>
</socialSentimentItem>
<socialSentimentItem>
  <itemType>facebook</itemType>
  <date>2017-10-31</date>
```

* Data Element XPath //socialSentimentItem

And click on the grey bar called **Filtered Data Element**. Add the following:

//itemType - to the ID box

//value - to the Value box

//date - to the Date box

The screenshot shows the 'Connect' interface with a breadcrumb trail: Home >> Edit Import >> SOAP Social Upadte >> SOAP Request. The main content area is titled 'Filtered Data Element' and contains XML data for 'socialSentimentItem'. A red arrow points to the 'XPath' field in the table below, which contains the value '//itemType'.

Multiple data elements may be retrieved by the above XPath expression, but only one element is shown below.

```
<socialSentimentItem>
  <itemType>facebook</itemType>
  <date>2017-12-31</date>
  <value>425</value>
</socialSentimentItem>
```

	*ID	Name	*Value	Date	Note
XPath	//itemType		//value	//date	

Data Set

And click on the grey bar called **Data Set**



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The filtered data set will be returned ready to be mapped to the previously defined scorecard items

Connect™

Home >> Edit Import >> SOAP Social Update >> SOAP Request

SOAP Response

Filtered Data Element

Data Set

Negative Values: Allow
Missing Values: Ignore
Value/Threshold Format: 1,000.00
Date Format: 12/31/2009
 Overwrite existing values

Metric Id/Name	Value	Date	Note
facebook	425.00	15-Mar-2018	
facebook	600.00	15-Mar-2018	
facebook	435.00	15-Mar-2018	
facebook	600.00	15-Mar-2018	
facebook	500.00	15-Mar-2018	
facebook	425.00	15-Mar-2018	

Click on OK on the top right hand side of the screen

The following screen will appear indicating that the 'Source Data' step is complete.

Click on the **Destination Metrics** button

Connect™

Home >> Edit Import >> Social Media Update

Basic Information

Source Data

Destination Metrics

Mapping

Schedule

► Details



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The Destination Metrics screen will appear, find the target Measures and click on them, in this case Facebook Likes and Twitter Mentions. The Measures will appear in the lower portion of the screen indicating they have been selected.

ID	Name	Organization
502	Facebook Likes	Samples
503	Twitter Mentions	Samples

Click on OK on the top right hand side of the screen

The following screen will appear indicating that the 'Destination Metrics' step is complete.

Click on the **Mapping** button

Home >> Edit Import >> Social Media Update

Save Cancel

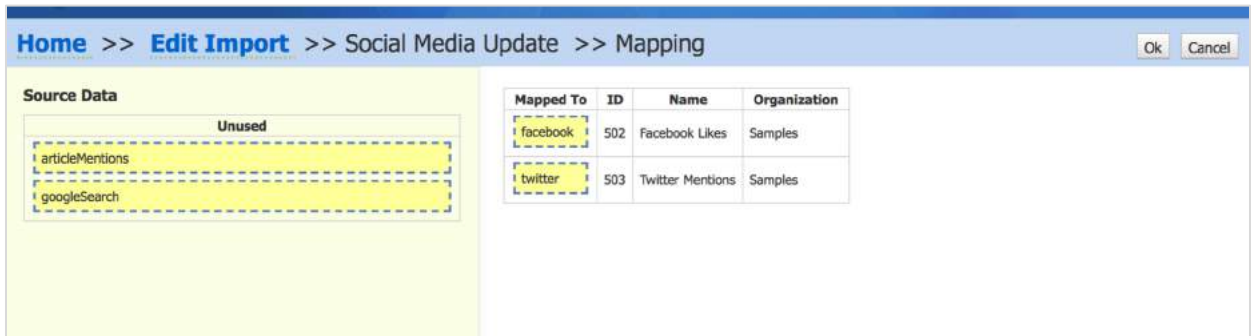
Basic Information Source Data Destination Metrics Mapping Schedule

Details



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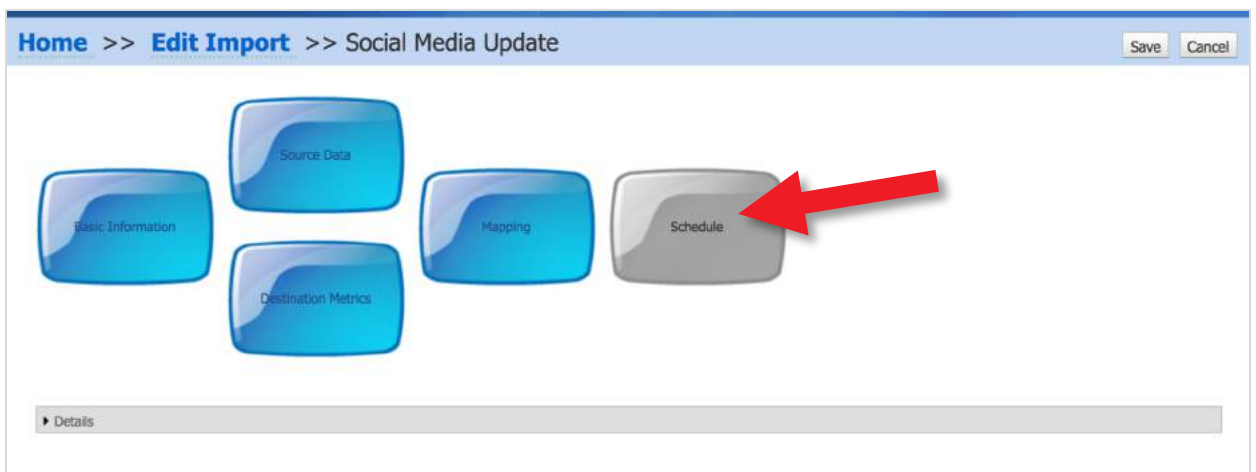
The Mapping screen will appear. Connect will map the fields automatically when the source and destination fields have the same or very similar names. If this does not happen, drag and drop the fields to map them yourself.



Click on OK on the top right hand side of the screen

The following screen will appear indicating that the 'Mapping' step is complete.

Click on the **Schedule** button





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The Schedule Import screen will appear. Use the drop-down menus to select the schedule you require. In this case we have selected every month on the first day of the month.

Home >> Edit Import >> Social Media Update >> Schedule Import

Do not schedule

New Schedule

Frequency: Monthly

On the First: Day

Hour: 12 Minute: 00

AM (UTC +0:00) GMT

Click on OK on the top right hand side of the screen

The following screen will appear indicating that the 'Scheduling' step is complete.

Click on the Save button on the top right hand side of the screen

Home >> Edit Import >> Social Media Update

Save Cancel

Basic Information

Source Data

Destination Metrics

Mapping

Schedule

Details



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The Home screen will appear. To run the import manually, click on the **Run Now** button. If successful, the Status will show green (if the import fails, the status will show amber or red, click on the box for more information).

The screenshot shows the 'Home' page with an 'Imports' table. The table has columns for Name, Status, Data Source, # of Mappings, Schedule, Last Run, and Actions. A red arrow points to the 'Run Now' button in the Actions column for the 'Social Media' import.

Name	Status	Data Source	# of Mappings	Schedule	Last Run	Actions
Social Media	Success	SOAP Social Media	2	On the First day of every month at 12:00AM GMT (UTC +0:00)	15 March 2018 15:04:07 GMT	Run Now Edit Delete

Below the Imports table is a 'Data Sources' table:

Name	Status	Last Contacted	Actions
My Files	Online	15 March 2018 15:00:12 GMT	Upload File View Files
SOAP Social Media	Online	15 March 2018 15:00:12 GMT	Edit Delete

Switch back from Connect to the application and go to the measures, you will see that they have been updated.

The screenshot shows the 'Facebook Likes' measure dashboard. It includes a performance gauge showing a score of 632 (up 48 from a goal of 600) and a historical performance line chart. The chart shows data from February 2017 to February 2018. Below the chart is a table of actual and threshold values.

ACTUAL AND THRESHOLD VALUES	SCORE	ACTUAL	RED	GOAL
February 2018	7.7	632	500	600