OFS API Fundamentals

What will APIs do for me?

- Create custom visualisations using raw OFS Data
- Combine financial information with performance data
- Dashboarding for daily, weekly, and monthly meetings
- Standardise your reporting and performance expectations across the business to speak a common language
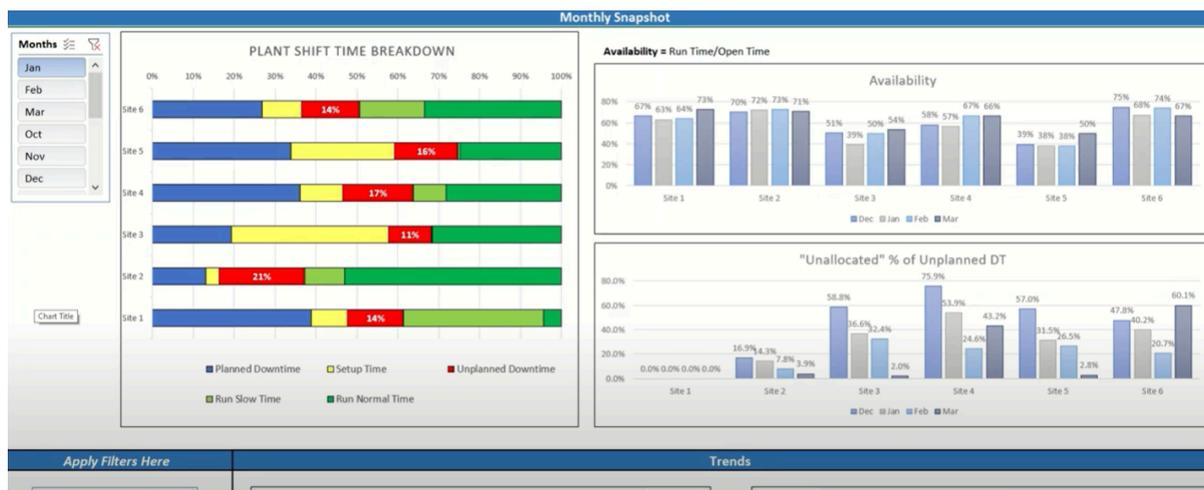
Combining APIs with OFS Data offers complete customisation to the organisation, a vehicle to create your own design that enables communication with the broader business.

Use an OFS API connection to automatically stream live performance data into an external data tool (i.e. MS Excel / Power BI) where your internal expertise can create dashboards and conduct analyses that cater to your unique business requirements.

So how can I get started?
Well, quite simply, there are only 3 steps involved.

- Choose your data
- Create your API connection link
- Establish a connection with your external data tool

But before we get started, it is important to note that we are extracting data on a line by line basis and report by report basis.

This means that if we needed Line report and Reason report data, for Lines 1 and 2, we would need to create four separate connections; Line 1 - (1) Line and (2) Reason Report, Line 2 - (3) Line and (4) Reason Report.

Alright, let's get started!

Steps to creating your first API connection

1. Identify what information we need

Do we need downtime data? OEE data? Perhaps you wish to pull in all activities on your line (to the millisecond) and create your own filters based on this information (that's called a Drilldown report!).

Your first step is to view the OFS Export Guide, particularly from point 3, Export Streams, onwards. Here you will see two things - an example of the link syntax structure you will need to make your connections and a list of different reports you can call upon.

For further information as to what each of these reports ('export_name') will provide you the column data for, find your report type under point 5, Data Returned by OFSDES.

2. Create your API Connection Link

Let's say our company is 'ABC Bottling' and we want to stream a live list of our downtimes for reporting purposes on Line 1 (OFS001), always showing the last 7 days.

Syntax:
https://abcbottling.ofsxpress.com/OFS001/server/export/reason?start=day-7&groupBy=day

This will take all Downtime data from the past 7 days and group the specific reasons together as a total to indicate how much lost time has been incurred on a day by day basis. We will use this link to connect this requested data to your external data tool.

We might see Labeller: Glue on Monday with 9 events and 23 minutes, and Thursday with 2 events and 9 minutes lost.

Testing your link is working:

Test your link in a browser. When doing so you must add "html=true" to indicate this is being executed in a browser. This should then be removed when connected to your data tool (more to come in step 3).

When tested in your browser you should see column headings with values below, this same information will be displayed when the connection is made to your tool.

3. Establish connection with your external data tool

In this example, we are going to use MS Excel, however, the process and output will be similar across tools. Once we have our working link available, we need to establish a connection 'via Web' and enter our link.
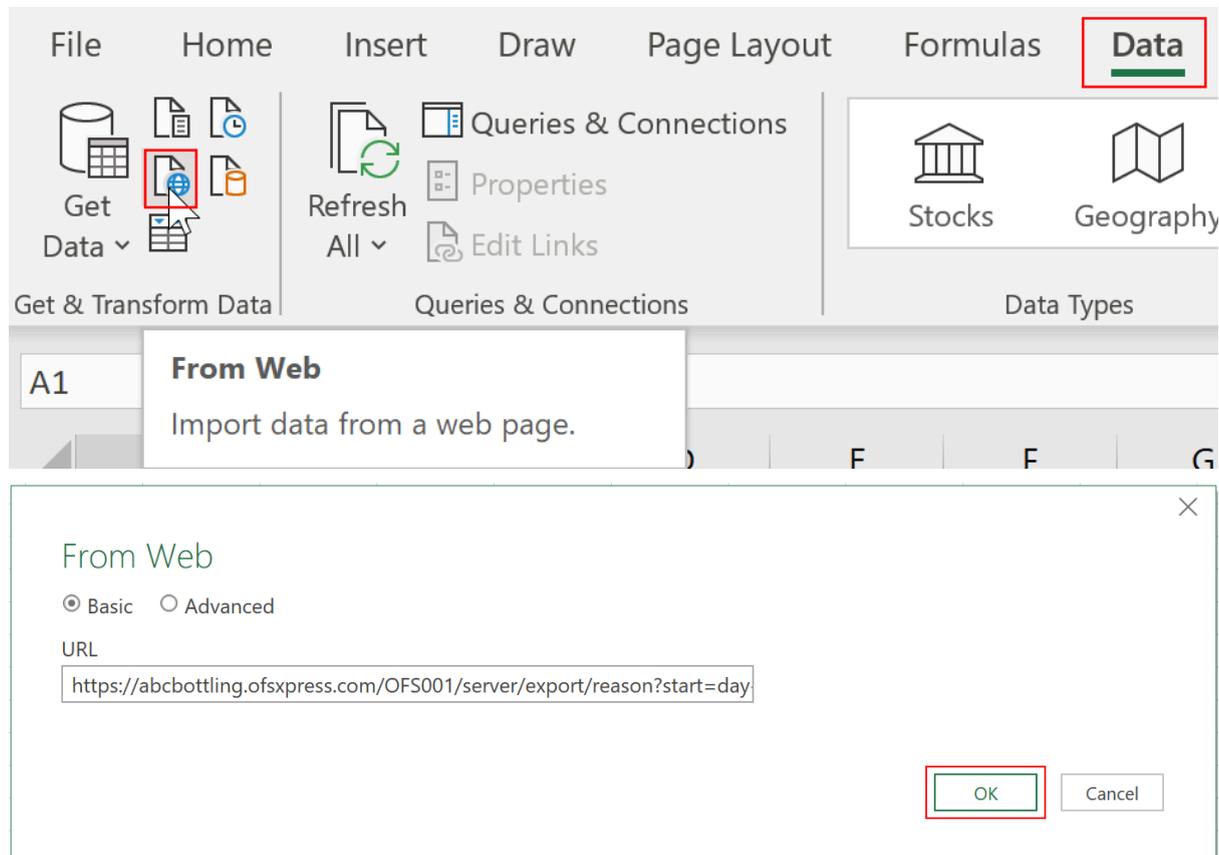
Enter your OFS Username and Password in the 'Basic' tab and select Connect.
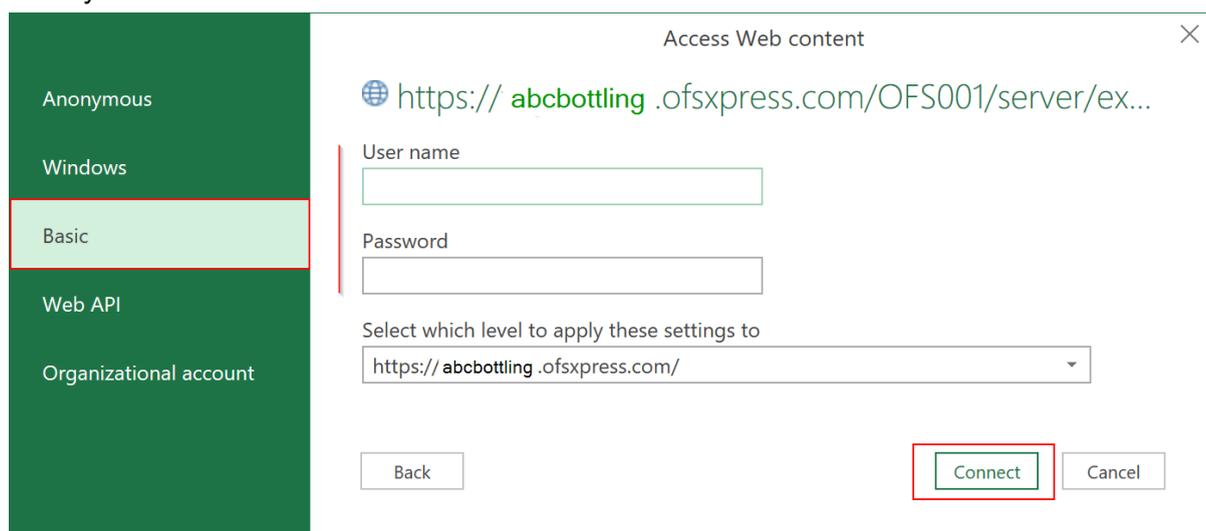
You will then see a preview of your data where you should select 'Load'. It is within this screen that you can make technical adjustments to 'transform data' if your team wishes to make technical adjustments to the raw data you are importing.

You will now have access to the data you have called upon.

	A	B	C	D	E	F	G	H
1	WorkcentreId	WorkcentreName	StartTime	EndTime	ReasonId	ReasonDescription	ReasonCategory	LostTimeSeconds
2	OFS001	Line 1	3/12/2021 0:00	4/12/2021 0:00	16	Full Clean	Operational	230721.518
3	OFS001	Line 1	3/12/2021 0:00	4/12/2021 0:00	34	Short Stop	Unallocated	476.784

What next?

From here, your internal data experts will be in the best position to support you in the process of creating a custom dashboard that speaks to your business operations and objectives. Our team will of course be on standby should you have any questions about extracting this information from OFS!

So… how are others using OFS Data with APIs?

Many OFS Customers today are utilising APIs to make an impact on their business to ensure everyone is on the same page, where standards can be defined, measured and compared in the pursuit of continuous improvement.
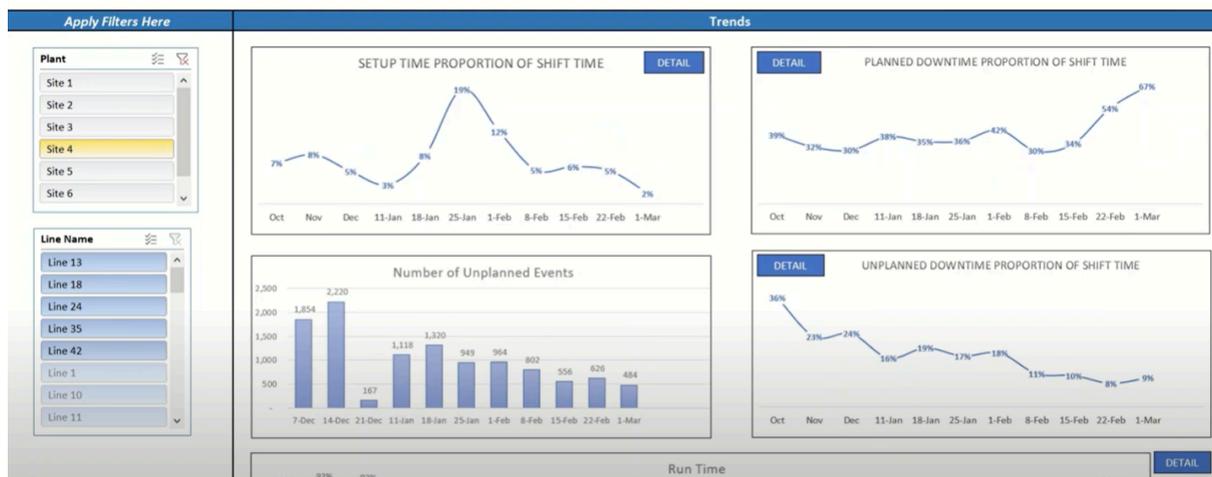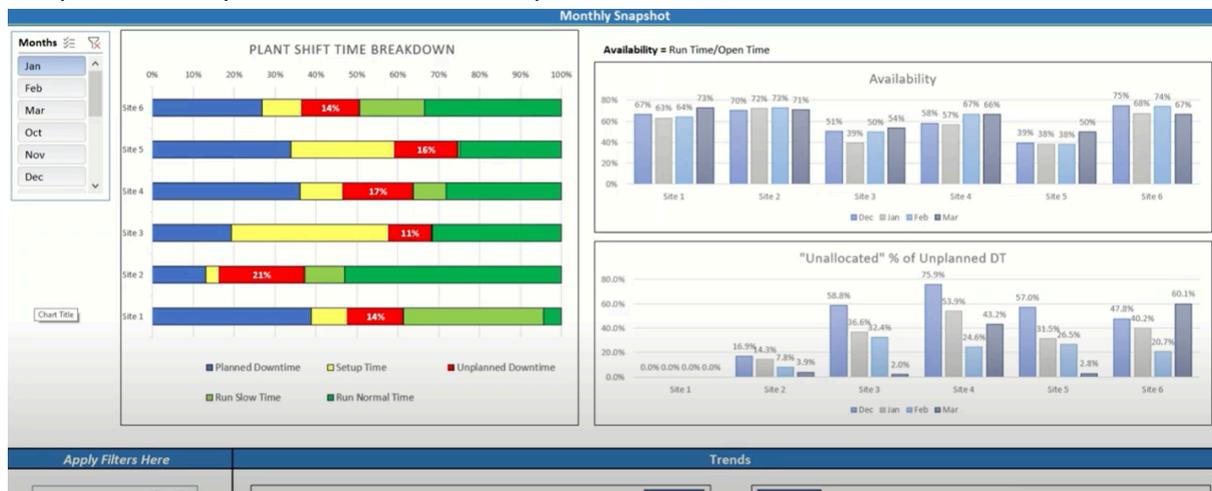
Support

If you require additional support in establishing your API connection, reach out to your Customer Success Representative (success@ofsystems.com) or the OFS Support desk (support@ofsystems.com) for guidance.