

XBRL API Update – Excel Add-in and other developments

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Topics

- XBRL and XBRL data
- Excel Add-in
- API updates
- SEC Tools

XBRL

- Open, nonproprietary, data standard
- Only standard that handles financial data and more
- Renders data fully understandable and machine-readable
- Seamlessly adapts to changes in reporting requirements and technology
- 180+ implementations worldwide

XBRL

- Types of programs
 - Financial regulator
 - Capital markets
 - Business registrars
 - Tax authority
 - Government oversight
 - Standard Business Reporting (business – government)
- Types of reporting entities
 - Public & private companies
 - Government entities
 - Banks
- US regulators
 - FDIC
 - SEC
 - FERC
 - Florida
- New non-US programs
 - European Securities Markets Authorities (ESMA)



How to get XBRL Data

- Commercial applications from XBRL US members:
 - Altova
 - Calcbench
 - Cognitive Quant
 - idaciti
 - Intrinio
 - Refinitiv
 - Tagnifi
 - Bright Analyst
- Open-source application – XBRL API



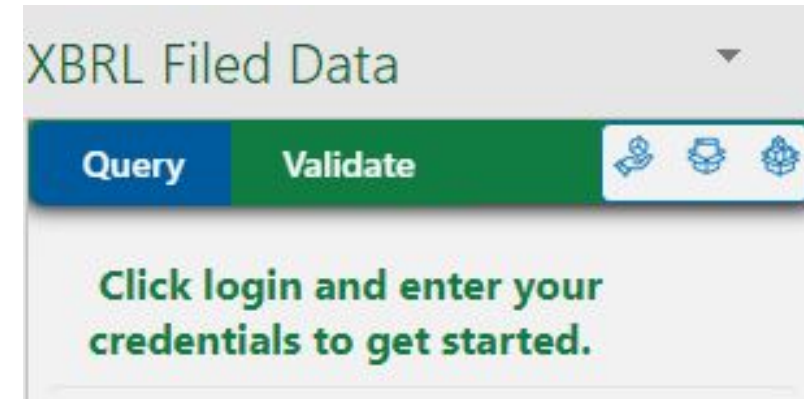
Excel Add-in for XBRL API (v2)

Query taskpane updates:

- added label endpoint to functions dropdown
- revised layout and basic filter options for query builders
- added fields that limit and offset data returned
- added sort and order functionality for fields returned
- added output options

NEW! **Validate** taskpane

Simple Statement & Disclosure **template** in XBRL Data Community



Excel Add-in for XBRL API (v2)

Function

fact

Select Report by Entity Name

or Get Facts by Entity Name

Get Facts by Entity CIK

or Get Facts by SIC Code ([SEC list](#))

Filter by Fiscal Year

Filter by Period

Select Value

Filter by Concept Name

Get Latest Facts

null

Get Facts with Dimensions

false

Data Limit

Data Offset

Fields to Return

concept.local-name

fact.value

period.fiscal-period

period.fiscal-year

Function + Data Data Query

Get

New API Fields

report.document-index

This field was added to separate the different document types and allow sorting from latest to earliest based on the type of document. This field uses an index so that reports can be returned in sequential order (1 = newest) based on the document type used.

This differs from period-index which returns an index based on reports filed by entity, whereas document-index returns an index based on reports filed by entity *and* document type.

The following uri will return Assets and Liabilities for the latest and second to latest 10-K's for the cik 0000937098.

[https://api.xbrl.us/api/v1/fact/search?report.document-type=10-K&report.document-index=1,2&concept.local-name=Assets,Liabilities&entity.cik=0000937098&fields=entity.name,report.document-type,report.base-taxonomy,period.fiscal-year.sort\(DESC\),concept.local-name.sort\(ASC\),fact.value](https://api.xbrl.us/api/v1/fact/search?report.document-type=10-K&report.document-index=1,2&concept.local-name=Assets,Liabilities&entity.cik=0000937098&fields=entity.name,report.document-type,report.base-taxonomy,period.fiscal-year.sort(DESC),concept.local-name.sort(ASC),fact.value)

New API Fields

fact.accuracy-index

In many cases companies report duplicate values in a filing. This is common with inline filings, where a value is reported in one location of the filing and duplicated in the notes. (This was not the case before inline filings)

In many cases duplicate values reported have different levels of accuracy. When extracting data for a filing you can get duplicate values as the database does not eliminate duplicate values in a filing.

Every fact value has an associated accuracy index where a fact with an accuracy index of 1 is the most accurate. For text values the longest string has a value of 1.

The accuracy index differs from the ultimus index, whereas the ultimus index defines the latest fact across multiple filings, the accuracy index defines the most accurate fact within a filing.

New API Fields

fact.accuracy-index

The following API call returns 3 values in Apples latest 10K for CashAndCashEquivalentsAtCarryingValue. There are 3 values because values are reported in the balance sheet and cash flow statement. To get only one value the search parameters should contain **fact.accuracy-index=1**. This will return only the first value in the table below.

<https://api.xbrl.us/api/v1/fact/search?dts.id=418604&period.fiscal-year=2020&concept.local-name=CashAndCashEquivalentsAtCarryingValue&fact.has-dimensions=false&fields=concept.local-name,fact.accuracy-index,fact.ultimus-index,fact.value,period.fiscal-period,period.fiscal-year>

The ultimus index has a much higher value as subsequent cash values have been reported in 10-Q's filed after the 10-K

| concept.local-name | fact.accuracy-index | fact.ultimus-index | fact.value | period.fiscal-period | period.fiscal-year |
|---------------------------------------|---------------------|--------------------|----------------|----------------------|--------------------|
| CashAndCashEquivalentsAtCarryingValue | 1 | 10 | 38,016,000,000 | Y | 2020 |
| CashAndCashEquivalentsAtCarryingValue | 2 | 11 | 38,016,000,000 | Y | 2020 |
| CashAndCashEquivalentsAtCarryingValue | 3 | 12 | 38,016,000,000 | Y | 2020 |

New API Fields

report.event-items

Filers report event items with every 8-K that is submitted. These event items identify what the 8-K relates to. Examples include Bankruptcy, Completion of Acquisition or Disposition of Assets, Changes in control etc.

This information is returned as a comma separated string using the event codes defined by the SEC. i.e. Bankruptcy is 1.03. The API will return the following if 3 events are covered by the 8-K

```
"report.event-items": "2.02, 7.01, 9.01"
```

This data was added to allow API users to identify what the 8-K related to, as the details are not necessarily included in the filing. We thought this would be extremely helpful given the volume of 8-K's filed.

The event types available can be found at : (<https://www.sec.gov/fast-answers/answersform8khtm.html>)

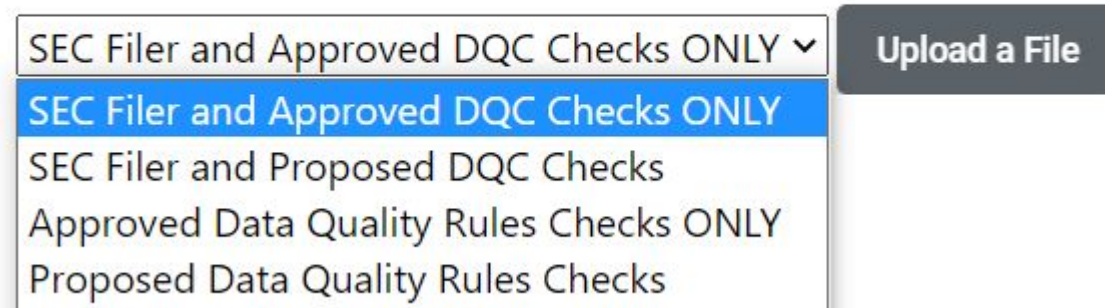
The API also allows filers to search for specific event items. The following query will return 8-K's related to the departure of a director.

```
https://api.xbrl.us/api/v1/report/search?report.event-items=5.02&fields=report.entity-name,report.event-items,report.filing-date,report.sec-url,report.limit(15)
```



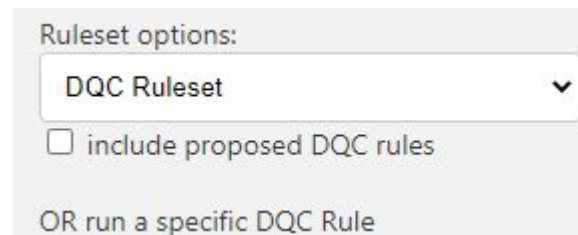
SEC Tools for Filers [\(<https://sectools.xbrl.us>\)](https://sectools.xbrl.us)

- added multiple rule set options for checking filings (Approved, Proposed, SEC Filer) - the default option is the same as 2020 version of SEC Tools (v15 approved, v16 review)



A screenshot of the SEC Tools interface. On the left, a dropdown menu is open, showing five options: "SEC Filer and Approved DQC Checks ONLY" (highlighted in blue), "SEC Filer and Proposed DQC Checks", "Approved Data Quality Rules Checks ONLY", and "Proposed Data Quality Rules Checks". To the right of the dropdown is a dark grey button labeled "Upload a File".

- REMEMBER: you can also configure these options in the XBRL Filed Data Excel Add-in, as well as running a single DQC rule



A screenshot of the "Ruleset options" section in the XBRL Filed Data Excel Add-in. It features a dropdown menu labeled "DQC Ruleset" with a downward arrow. Below the dropdown is a checkbox labeled "include proposed DQC rules" which is currently unchecked. At the bottom of the section, the text "OR run a specific DQC Rule" is displayed.

SEC Tools for Filers

- REMEMBER: **All** XBRL US Members can use Company Filings Analysis and Taxonomy View & Compare functions
- added pop-up instructions to Search Text

The screenshot displays the 'Tools for SEC Filers' interface, version 1.0.5. On the left, a sidebar menu includes 'SEC Filer Member Ruleset >', 'Company Filing Analysis >', 'Taxonomy View & Compare >', and input fields for 'Enter Concept Name', 'Enter Axis Name', 'Enter Member Name', 'Select Period', and 'Select Fiscal Year'. The 'Search Text' section is active, showing a search input field with a magnifying glass icon and a 'Facts' section below it. A blue pop-up box is overlaid on the search area, providing instructions: 'To search for a term, type in the word you're looking for. For example 'tsunami'.', 'To search for multiple words use the | operator, for example 'tsunami | earthquake' will records with tsunami or earthquake in them.', 'To exclude a word from the list use '!'. For example to search for all records with the word tsunami but exclude the word earthquake enter 'tsunami &! earthquake'.', 'To find records with both words in it, enter 'tsunami & earthquake'.', 'To find an exact word match, type the company name in single quotes, for example "subsequent tsunami caused".', and 'The full text search characters are as follows: | => OR Operator, & => AND Operator, &! => NOT Operator, 'text_here' => Exact Match Operator, () => Use Parenthesis to group search logic, NEAR/n => Identify closeness to words. 'tsunami NEAR/3 Japan' will find records with both words within 3 words of each other., << => Declares order of words. 'tsunami << Japan' will find records with tsunami before Japan., PARAGRAPH => Identify records where both words occur in the same paragraph. I.e. 'tsunami PARAGRAPH Japan'.

- added release notes linked as pop-up from the version number (currently v1.0.5)

Questions