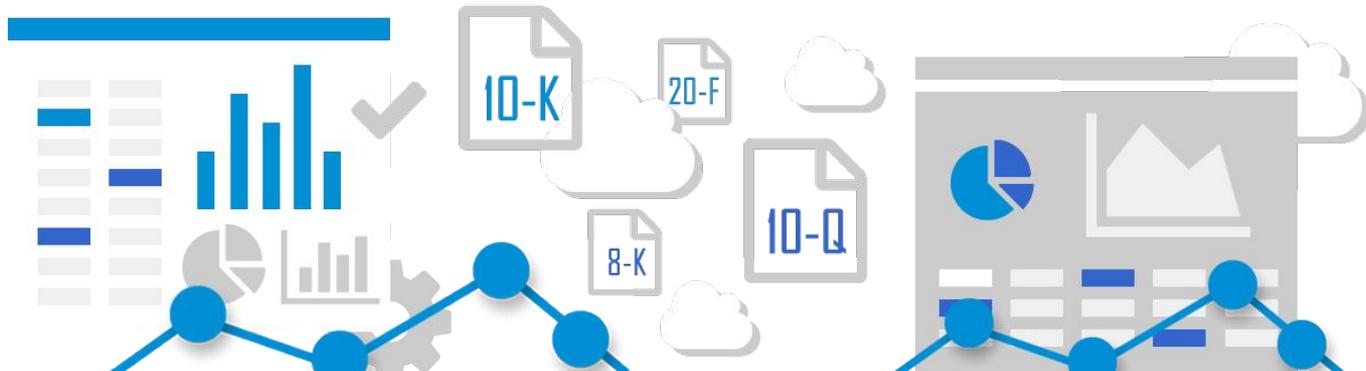


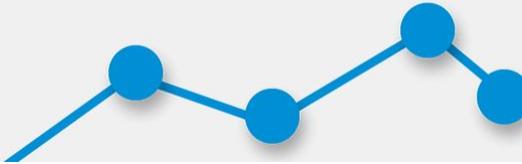


Livestream Feed Deployment Guide

A developer's guide for accessing data from the TagniFi Fundamentals Livestream Feed.



Summary

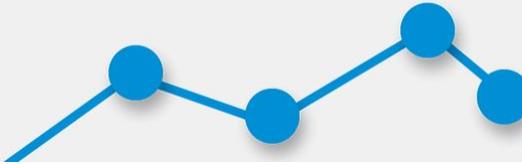


TagniFi Fundamentals delivers standardized fundamental data within minutes of a 10-K or 10-Q filing with the Securities and Exchange Commission (“SEC”). The Livestream Feed provides users with immediate access to all of the data added to TagniFi Fundamentals.

This document will walk you through the process of deploying the TagniFi Fundamentals dataset using the Livestream Feed. In addition, we will cover how to backfill your database with historical data from TagniFi Fundamentals.

Note: This document is a supplement to the TagniFi documentation located at <http://docs.tagnifi.com>.

Definitions



- **Filing:** A 10-K, 10-Q or other document filed with the SEC.
- **Industry Template:** A standardized format of financial statements for different industries. These currently include:
 - *Commercial and Industrial:* A standardized format for service and manufacturing companies ([view docs](#)).
 - *Banking and Savings:* A standardized format for banks and depository institutions. ([view docs](#))
 - *Insurance:* A standardized format for insurance and surety companies ([view docs](#)).
- **Statement:** A standardized financial disclosure from a Filing. All Filings includes the following statements:
 - *Balance Sheet:* A standardized statement of assets, liabilities and shareholders' equity for a company.
 - *Income Statement:* A standardized statement of revenue, expenses and profit for a company.
 - *Cash Flow Statement:* A standardized statement of operating, investing and financing cash flows for a company.
- **Tag:** A standardized element of a Statement (ex. Total Assets).
- **Period:** A collection of tags for specific fiscal periods (ex. Q1-2016).
- **Period Type:** Indicates if the period is an annual, quarter, year_to_date or trailing_twelve_month period.
- **Fundamental:** A collection of tags for a Period. When a fundamental is returned from an action, regardless if it's a single fundamental value or multiple fundamental values being returned, it will always be wrapped within a fundamentals collection.

Authentication

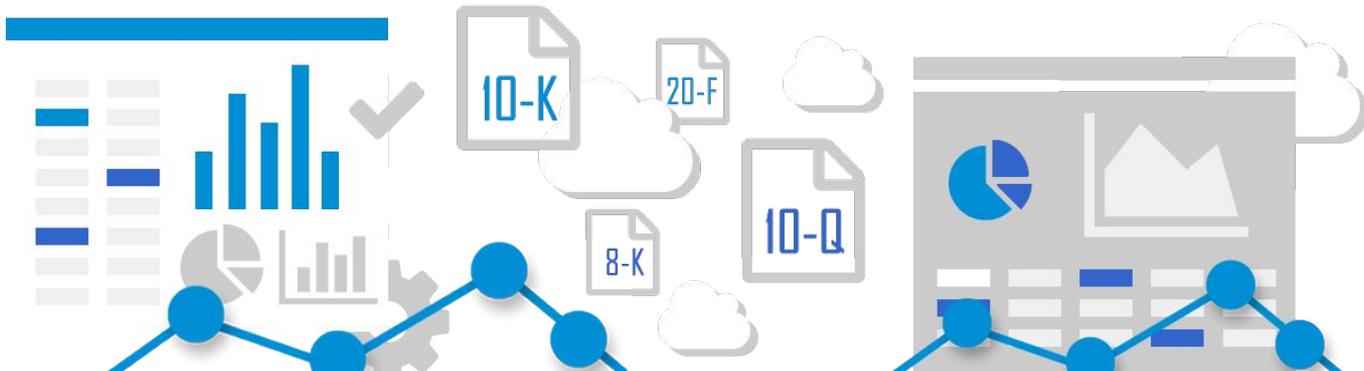


You authenticate to the Tagnifi API via HTTP Basic Auth over HTTPS. Please send your Tagnifi key via the basic auth username; the basic auth password is not required.

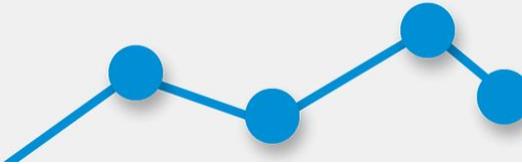
Note: all requests must be made via HTTPS and must be authenticated.

Step 1: Setting Up The Livestream

This section will walk you through the process of getting the latest data from Tagnifi Fundamentals.



Get Latest Fundamentals



Get Latest Fundamentals is an API endpoint containing the latest 200 Filings deployed in Tagnifi Fundamentals. Periods appear in chronological order with the most recent Periods at the top of the response.

Example

<https://api.tagnifi.com/fundamentals/latest>

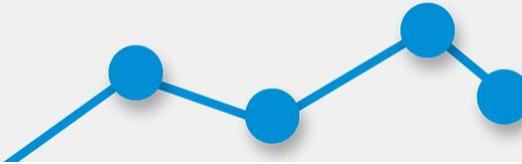
```
{
  "meta": {
    "copyright": "Tagnifi, LLC. 2015-2018"
  },
  "periods": [
    {
      "filing_id": "0000064803-16-000074",
      "company_id": "US0000064803",
      "statement": "balance_sheet_statement",
      "period_type": "quarter",
      "industry_template": "commercial",
      "fiscal_year": 2015,
      "fiscal_quarter": 4,
      "date_deployed": "2018-04-28T07:54:21Z",
      "fundamentals_link":
"/fundamentals?company=US0000064803&statement=balance_sheet_statement&period_type=quarter&fiscal_year=2015&fiscal_quarter=4&industry_template=commercial"
    },
  ],
}
```

Endpoint

<https://api.tagnifi.com/fundamentals/latest>

This is an example of a Period for the Q4-2015 balance sheet of company US0000064803. It was deployed under the commercial template on 2016-04-28. **Follow the [fundamentals_link](#) to Search Fundamentals for this Period.**

Search Fundamentals



Search Fundamentals is an API endpoint containing Fundamentals by Period for a company. It can include Fundamentals from a single period or multiple periods. In the Livestream it will always be for a single period.

Example

```
https://api.tagnifi.com/fundamentals?company=US0000064803&statement=balance_sheet_statement&period_type=quarter&fiscal_year=2015&fiscal_quarter=4&industry_template=commercial
```

```
{
  "meta": {
    "copyright": "Tagnifi, LLC. 2015-2018"
  },
  "fundamentals": [
    {
      "filing_type": "10-K",
      "shares_outstanding": 1025699605,
      "shares_outstanding_date": "2017-02-03",
      "filing_link": "http://www.sec.gov/Archives/edgar/data/64803/000006480317000006/0000064803-17-000006-index.htm",
      "statement": "balance_sheet_statement",
      "reported_date": "2017-02-09",
      "reported_time": null,
      "start_period": "2015-12-31",
      "end_period": "2015-12-31",
      "fiscal_year": 2015,
      "fiscal_quarter": 4,
      "annual_period": true,
    }
  ]
}
```

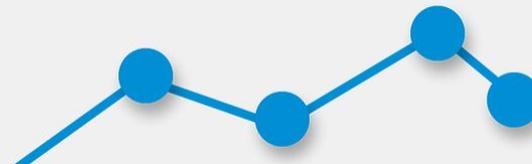
Endpoint

<https://api.tagnifi.com/fundamentals>

This is an example of a Period using the Q4-2015 balance sheet of company US0000064803.

Continued on next page

Search Fundamentals (cont'd)



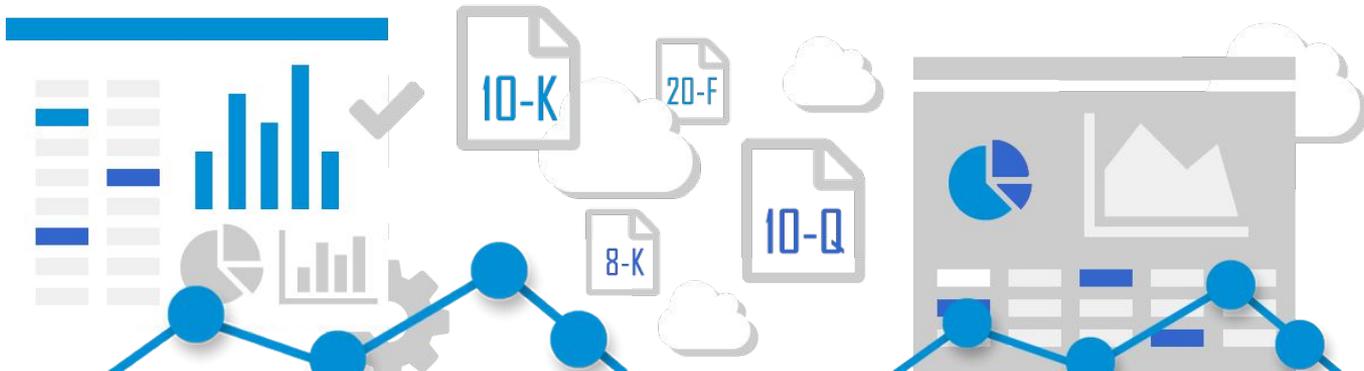
```
"quarter_period": true,
"year_to_date_period": false,
"trailing_twelve_month_period": false,
"industry_template": "commercial",
"company": {
  "name": "CVS HEALTH Corp",
  "id": "US0000064803",
  "ticker": "CVS"
},
"tags": [
  {
    "name": "Accounts Payable",
    "tag": "accountspayable",
    "value": 7490000000,
    "transparencies": [
      {
        "name": "AccountsPayableCurrent",
        "value": 7490000000,
        "operator": "+",
        "source": "xbrl_usgaap",
        "xbrl_label": null,
        "xbrl_unit": null,
        "xbrl_domain": null
      }
    ]
  }
],
```

These are the Tags for the Q3-2015 balance sheet for the company US0000064803.

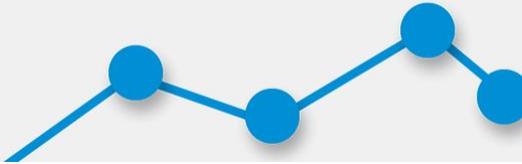
These are the Transparencies for the Tags showing the as-reported XBRL detail.

Step 2: Getting Historical Data

This section will walk you through the process of backfilling your database with TagniFi Fundamentals.



Get Covered Companies



Get Covered Companies is an API endpoint with all companies covered by Tagnifi Fundamentals.

Endpoint

<https://api.tagnifi.com/companies/covered>

Example

<https://api.tagnifi.com/companies/covered>

```
{
  "meta": {
    "copyright": "Tagnifi, LLC. 2015-2018"
  },
  "companies": [
    {
      "name": "1 800 FLOWERS COM INC",
      "id": "US0001084869",
      "industry_template": "commercial",
      "ticker": "FLWS",
      "fundamentals_history_link": "/fundamentals/history?company=US0001084869"
    },
  ],
}
```

This is an example of a covered company. The ID is US0001084869 and it is covered under the commercial template. **Follow the `fundamentals_history_link` to Get Fundamentals History for this Company.**

Get Fundamentals History



Get Fundamentals History is an API endpoint returning all Periods available for a covered company.

Endpoint

<https://api.tagnifi.com/fundamentals/history>

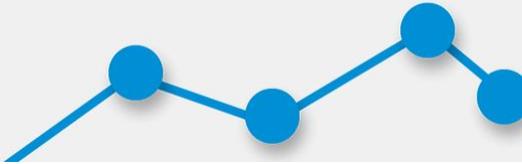
Example

<https://api.tagnifi.com/fundamentals/history?company=US0001084869>

```
{
  "meta": {
    "copyright": "Tagnifi, LLC. 2015-2018"
  },
  "periods": [
    {
      "filing_id": "0001437749-18-002143",
      "company_id": "US0001084869",
      "statement": "balance_sheet_statement",
      "period_type": "quarter",
      "industry_template": "commercial",
      "fiscal_year": 2018,
      "fiscal_quarter": 2,
      "date_deployed": "2018-02-09T18:26:13Z",
      "fundamentals_link":
"/fundamentals?company=US0001084869&statement=balance_sheet_statement&period_type=quarter&fiscal_year=2018&fiscal_quarter=2&industry_template=commercial"
    }
  ],
}
```

This is an example of a Period for the Q2-2018 balance sheet of company US0001084869. It was deployed under the commercial template on 2016-02-09. **Follow the [fundamentals_link](#) to Search Fundamentals for this Period.**

Search Fundamentals



Search Fundamentals is an API endpoint containing Fundamentals by Period for a company. It can include Fundamentals from a single period or multiple periods. In the Livestream it will always be for a single period.

Example

```
https://api.tagnifi.com/fundamentals?company=US0001084869&statement=balance_sheet_statement&period_type=quarter&fiscal_year=2018&fiscal_quarter=2&industry_template=commercial
```

```
{
  "meta": {
    "copyright": "TagniFi, LLC. 2015-2018"
  },
  "fundamentals": [
    {
      "filing_type": "10-Q",
      "shares_outstanding": 64536976,
      "shares_outstanding_date": "2018-02-02",
      "filing_link": "http://www.sec.gov/Archives/edgar/data/1084869/000143774918002143/0001437749-18-002143-index.htm",
      "statement": "balance_sheet_statement",
      "reported_date": "2018-02-09",
      "reported_time": "2018-02-09T17:57:57.0000000+00:00",
      "start_period": "2017-12-31",
      "end_period": "2017-12-31",
      "fiscal_year": 2018,
      "fiscal_quarter": 2,
      "annual_period": false,
    }
  ]
}
```

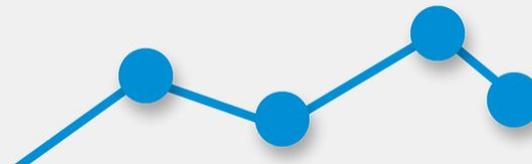
Endpoint

<https://api.tagnifi.com/fundamentals>

This is an example of a Period using the Q2-2018 balance sheet of company US0001084869.

Continued on next page

Search Fundamentals (cont'd)



```
"quarter_period": true,
"year_to_date_period": false,
"trailing_twelve_month_period": false,
"industry_template": "commercial",
"company": {
  "name": "1 800 FLOWERS COM INC",
  "id": "US0001084869",
  "ticker": "FLWS"
},
"tags": [
  {
    "name": "Cash and Equivalents",
    "tag": "cashequivalents",
    "value": 232589000,
    "transparencies": [
      {
        "name": "CashAndCashEquivalentsAtCarryingValue",
        "value": 232589000,
        "operator": "+",
        "source": "xbrl_usgaap",
        "xbrl_label": "Cash and cash equivalents",
        "xbrl_unit": "iso4217-usd",
        "xbrl_domain": []
      }
    ]
  }
],
```

These are the Tags for the Q2-2018 balance sheet for the company US0001084869.

These are the Transparencies for the Tags showing the as-reported XBRL detail.

Have Questions?

Email us anytime at support@tagnifi.com

