ForSight^{TM} API Documentation Version 3

Updated 04/28/14

Contents

Release Notes

Version 3 04/28/2014 Update

- Updated rate limit HTTP error code from 509 to 429. (Affects API versions 1, 2, and 3)

Version 3 04/05/2014 Update

- Added twittersocial/sentposts codes. Please refer to the twittersocial/sentposts API endpoint for more details. (Available in API version 3)
- Added twittersocial/totalengagement codes. Please refer to the twittersocial/totalengagementAPI endpoint for more details. (Available in API version 3)
- Added twittersocial/followers codes. Please refer to the twittersocial/followers API endpoint for more details. (Available in API version 3)
- Added gender query parameter for the posts API endpoint. If gender is set, then only posts, whose author matching the specified gender, will be returned.

Version 3 03/08/2014 Update

- Updated Error codes. Please review the Errors section for specific changes.
- Version number attribute will not be returned in any responses.
- All date and time from all the responses will be in ISO 8601 format (YYYY-MM-DDThh:mm:ss).
- list API endpoint's resultsEnd attribute response changed from inclusive to exclusive.
- detail API endpoint's resultsEnd attribute response changed from inclusive to exclusive.
- Added twittermetrics API endpoint. Please refer to the twittermetrics API endpoint for more details. (Available in API version 3)

Version 3 12/01/2013 Update

- Updated extendLimit query parameter for the posts API endpoint, if it is set to true, then a maximum of 10,000 posts will be returned per call. Please refer to the posts API for more details. (Available in API versions 1, 2, and 3)

Version 3 10/29/2013 Update

- Updated API rate limit from 100 requests per minute and 1,000 requests per hour per user to just 120 requests per minute per user. Additional hourly rate limit is removed. Updated rate limit HTTP error code from 420 to 509. (Affects API versions 1, 2, and 3)

Version 3 08/27/2013 Update

- Added extendLimit query parameter for the posts API endpoint, if it is set to true, then a maximum of 2,500 posts will be returned per call. Please refer to the posts API endpoint for more details. (Available in API versions 1, 2, and 3)

Version 3 Release Notes

- Updated the current API version to 3. Please refer to each API endpoint for more details on how to update your version parameter. (Available in API version 3)
- Added custom content sources for each custom content type in the sources API endpoint. Previously all custom content types were summed and displayed as one single source of type "Custom." In version 3, each custom content type will be displayed individually. (Available in API version 3)
- Added numberOfRelevantDocuments, groupId, group, groupHidden, volume, and categoryId fields for the

results API endpoint. Please refer to the results API endpoint for more details. (Available in API versions 1, 2, and 3)

- Added hideExcluded query parameter for the results API endpoint. Please refer to the results API endpoint for more details. (Available in API versions 1, 2, and 3)
- Added location field for non-Twitter posts for the posts API endpoint. Previously only Twitter posts with location information were available, now non-Twitter posts that have location information will be made available through the posts API endpoint. (Available in API versions 1, 2, and 3)
- Updated authorRank filter parameter in the posts API endpoint. Previously the authorRank filtered on the field authorRank, which is a ForSight^{TM} metric that describes a Twitter user's reach and authority. The authorRank field is deprecated from all versions of the API, and the authorRank filter will filter on the authorKlout field instead. Please refer to the posts API endpoint for more details. (Available in API versions 1, 2, and 3)
- Added authorFollowers, authorFollowing, authorKlout, and authorPosts fields in the posts API endpoint. Please refer to the posts API for more details. (Available in API versions 1, 2, and 3)
- Deprecated authorRanks field, and added totalImpressions, and authorDetails (includes following, followers, username, posts, kloustScore, and detailsDate) fields in the authors API endpoint. Please refer to the authors API endpoint for more details. (Available in API versions 1, 2, and 3)

Version 2 Release Notes

- Updated the current API version to 2. Please refer to each API endpoint for more details on how to update your version parameter. (Available in API version 2)
- Added an authentication API endpoint. Please refer to the authenticate API endpoint for more details. (Available in API version 2)
- Added Monitor Tags information. Please refer to the monitor list and monitor detail API endpoints for more details. (Available in API version 2)
- Added a monitor topics API endpoint. Please refer to the monitor topics API endpoint for more details. (Available in API versions 1, and 2)
- Added language and location filters for the monitor posts API endpoint. Please refer to the monitor posts API endpoint for more details. (Available in API versions 1, and 2)

Introduction

Crimson Hexagon's ForSight^{TM} platform has an API allowing programmatic access to some of its analysis capabilities. There are two main functions of the API:

Retrieving Results - You can use the API to access the analysis results computed by the system, for example to retrieve the number of posts found per day, the percentage of posts in each category, etc.

- Intended use: To integrate ForSight^{TM} data into third-party systems, such as custom dashboards or portals, or to programmatically extract data for offline analysis.
- Alternatives: If you just need to export per-monitor results in an Excel-compatible format, you can do so directly from the ForSight^{TM} web interface, without using the API.

Uploading Content - You can also use the API to upload content (posts, documents, etc.) for analysis. All content uploaded with the API will be accessible only to your company, and not to other Crimson Hexagon customers.

- Intended use: To analyze content from offline sources (e.g. customer surveys), content from protected online sources (e.g. password-protected forums), or content that you've collected or processed in some special way. Not all data attributes are supported by the content upload. Please see the content upload API endpoint for more details.
- Alternatives: If the content you want to analyze resides in a publicly-accessible blog, RSS feed, or forum site, then using the content API is may not be necessary, as we either have the content in our system already or can register it so that it could be included. Please contact your account manager for more information.

Setup

Before you use the API, Crimson Hexagon will provision an API account username and password that are separate from the credentials you use on the ForSight^{TM} platform. These credentials can then be used to call any of the API endpoints described in this document.

If you'd like to use the content upload API endpoint, we'll also create one or more new "content types" for your use. These content types will appear in the ForSight^{TM} platform as checkboxes, alongside the existing content sources checkboxes. Each post or document that you upload using the content upload API will be tagged with one of these customer-specific content types. You can then set up a monitor to include content from one or more of your proprietary content types, either alone or in combination with Blogs, Twitter, and other existing content sources. Other Crimson Hexagon customers will not be able to access your proprietary content types.

Basics

The API consists of REST-style HTTPS endpoints located at https://forsight.crimsonhexagon.com/api/*, where the * is replaced by a specific path (described below).

- Authentication: The authenticate endpoint is used to obtain an authentication token using your username and password, and an HTTP 401 or 403 response will be returned if the credentials are missing or invalid (see the Errors section below).

- Input: All endpoints require one or more query string parameters. The one parameter required in all cases is version. The current API version is 3. Additional endpoint-specific parameters are described below.

- Response: HTTP 200 is returned upon success; other status codes are returned for various error cases as specified in the Errors section below. The response body will consist of UTF-8 encoded JSON data containing various parameters described below.

- Rate limiting: Each user is allowed to make up to 120 requests per minute. Any requests made beyond these will be rejected with an HTTP 429 error (see Errors section below). Every response will contain 2 headers:

o X-RateLimit-Limit: 120 (Total API requests per minute for the current user)
o X-RateLimit-Remaining: X (Total API requests per minute remaining for the current user, where X>=-1 and <120)

Errors

If the API call was successful, an HTTP 200 status code is returned, along with a JSON response as described above. If an error occurred, one of the following status codes will be returned:

- HTTP 400: Returned if the request is malformed, missing parameters, invalid, or an internal error occurred.
- HTTP 401: Returned if the request did not supply HTTP authentication credentials, or if the credentials were not of the expected type.
- HTTP 404: Returned if a parameter maps to an unknown entity (e.g. username parameter in the list endpoint)
- HTTP 429: Returned if the user is being rate-limited. Currently users are limited to 120 requests per minute. Any requests made beyond this limit will result in an HTTP 429 error.

For HTTP 429 errors, the X-RateLimit-Remaining field in the HTTP header will have a value of -1, and a JSON response is returned, containing a message explaining the error. For example:

```
{
        "status":"error",
        "message":"Rate Limited: You have exceeded 120 requests in 1 minute"
}
```

For all errors, a JSON response is returned, containing a message explaining the error. For example:

```
{
        "status":"error",
        "message":"The required parameter 'id' was missing",
}
```

Testing

As you develop your code to use the API, please inform Crimson Hexagon support so that our technical staff is aware of your intended use cases. This will help us identify potential errors and recommend the most effective use of the API.

Since the content upload API endpoint adds data to the system, special care should be taken to ensure that the data uploaded is valid and will work as desired. Upon request, Crimson Hexagon can make available our QA system on a limited basis, to allow you to upload content without affecting our production system. This will help you to ensure that your content is correctly formatted, and allow Crimson Hexagon to examine your content files if necessary before you start uploading content into the production system.

If you have any other questions using the API, please contact support@crimsonhexagon.com.

API Endpoints

Authenticate

The authenticate API endpoint is accessed at https://forsight.crimsonhexagon.com/api/authenticate. The query-string parameters are:

- **version**: Required; must be equal to 3.
- **username**: Required; specifies which ForSight™ user's username should be used for API authentication.
- **password**: Required; specifies which ForSight™ user's password should be used for API authentication.

Example request:

> https://forsight.crimsonhexagon.com/api/authenticate?version=3&username=Your_Username&password=Your_Password

The response is a JSON-formatted authentication token information.

Example response:

```
{
  "expires":"2012-08-03T18:32:58",
  "status":"success",
  "auth":"MDBjYmQyMTctNTY1Yy00MGRlLTlkOWQtYTRmNmFjZDBjYzJm"
}
```

The JSON object attributes:

- **expires** is the expiration time, in UTC, in ISO 8601 format (YYYY-MM-DDThh:mm:ss), of the current authentication token. Each token will expire 6 hours from the time of authentication request.
- **status** is the API status, either success or error. See the Errors section above.
- **auth** is your assigned authentication token.

Monitor List

The monitor list API endpoint is accessed at https://forsight.crimsonhexagon.com/api/monitor/list. The query-string parameters are:

- **version**: Required; must be equal to 3.
- **auth:** Required; must be your assigned authentication token.
- **username**: Optional; specifies which ForSight™ user's monitors should be returned. Note that this username is not necessarily the same as the username used for API authentication; typically the API user has access to multiple ForSight™ users (e.g. all users for your company). If no username is specified then, the API username will be used as the default value, and only monitors of the customer, which the API user belongs to and have access to, will be returned. If the API user has access to a child dashboard, then those monitors will not be returned by default. But you can specify a username of a child dashboard to get the list of desired monitors.

Example request:

> https://forsight.crimsonhexagon.com/api/monitor/list?version=3&username=Desired_Username&auth=YourAuthenticationToken

The response is a JSON-formatted list of monitor information.

Example response:

```
{
  "monitors":[
    {
      "tags":[
      ],
      "id":12345678,
      "enabled":"true",
      "name":"Monitor name one",
      "resultsStart":"2012-08-01T00:00:00",
      "resultsEnd":"2012-09-07T00:00:00",
      "type":"BUZZ"
    },
    {
      "tags":[
        {
          "name":"tag name one"
        },
        {
          "name":"tag name two"
        }
      ],
      "id":12345679,
      "enabled":"false",
      "name":"Monitor name two",
      "type":"OPINION"
    },
    {
      "tags":[
        {
          "name":"tag name A1"
        },
        {
          "name":"tag name A2"
        }
      ],
      "id":12345676,
      "enabled":"false",
      "name":"Monitor name three",
      "type":"SOCIAL"
    }

  ],
  "status":"success
}
```

The JSON object attributes:

- **status** is the API status, either success or error. See the Errors section above.

- **monitors** is a JSON array of zero or more monitors that are visible to the specified user. Each monitor has a number of attributes:

    o **id** is the internal identifier of the monitor in the ForSight™ platform. This value can be used later to train or gather more information about the monitor (see below).

    o **name** is the name of the monitor, as entered by the user who created it.

    o **type** is the monitor's type, either BUZZ, OPINION or SOCIAL.

    o **resultsStart** (inclusive) and **resultsEnd** (exclusive) are the start and end dates of available monitor results. These attributes are not present if no results are available for the monitor.

    o **enabled** has the value true if the monitor is currently enabled and generating results, and false otherwise.

    o **tags** is a JSON array of zero or more user-defined names of the tags the monitor is tagged with on the user's dashboard.

Monitor Detail

The monitor detail API endpoint is accessed at https://forsight.crimsonhexagon.com/api/monitor/detail. The query-string parameters are:

- **version**: Required; must be equal to 3.
- **id**: Required, must be the id of a valid monitor; specifies which monitor's details should be returned. This id can be obtained from the monitor list API endpoint.
- **auth:** Required; must be your assigned authentication token.

Example request:

> https://forsight.crimsonhexagon.com/api/monitor/detail?version=3&id=123456789&auth=YourAuthenticationToken

The response is a JSON-formatted list of monitor details.

Example response for a Buzz monitor:
```
{
  "tags":[
        {
          "name":"tag name one"
        },
        {
          "name":"tag name two"
        }
  ],
  "enabled":"true",
  "status":"success",
  "description":"",
  "name":"Example Monitor 1",
  "id":"12345567",
  "categories":[
    {
      "id":436333348,
      "status":"red",
      "sortOrder":100,
      "hidden":false,
      "name":"Basic Positive",
      "trainingDocs":0
```

```
          },
          {
            "id":436333349,
            "status":"red",
            "sortOrder":101,
            "hidden":false,
            "name":"Basic Neutral",
            "trainingDocs":0
          },
          {
            "id":436333350,
            "status":"red",
            "sortOrder":102,
            "hidden":false,
            "name":"Basic Negative",
            "trainingDocs":0
          }
        ],
        "resultsStart":"2012-08-01T00:00:00",
        "resultsEnd":"2012-09-01T00:00:00"
      }
```

Example response for an Opinion monitor:

```
      {
        "tags":[
        ],
        "enabled":"false",
        "status":"success",
        "description":"",
        "name":" Example Monitor 2",
        "id":"12345567",
        "categories":[
          {
            "id":440614944,
            "groupId":440614939,
            "status":"green",
            "sortOrder":1,
            "hidden":false,
            "name":"Category Name 1",
            "group":"Positive",
            "trainingDocs":23
          },
          {
            "id":440614948,
            "groupId":440614937,
            "status":"yellow",
            "sortOrder":6,
            "hidden":false,
            "name":" Category Name 2",
            "group":"Negative",
            "trainingDocs":15
          },
          {
            "id":440614947,
            "groupId":440614946,
            "status":"green",
            "sortOrder":8,
```

```
        "hidden":true,
        "name":"Off-topic",
        "group":"Irrelevant",
        "trainingDocs":26
      }
    ],
    "resultsStart":"2011-01-01T00:00:00",
    "resultsEnd":"2011-01-01T00:00:00"
  }
```

The JSON object attributes:

- **status** is the API status, either success or error. See the Errors section above.
- **name** is the name of the monitor, as entered by the user who created it.
- **id** is the internal identifier of this monitor in the ForSight™ platform.
- **description** is the description of the monitor, as entered by the user who created it.
- **resultsStart** (inclusive) and **resultsEnd** (exclusive) are the start and end dates of available monitor results. These attributes are not present if no results are available for the monitor.
- **enabled** has the value true if the monitor is currently enabled and generating results, and false otherwise.
- **tags** is the user-defined name or names of the tags the monitor is tagged with on the user's dashboard, if any. If the monitor is not tagged, the value for the tags attribute will be empty.
- **categories** is a JSON array of the categories of the specified monitor. Each categories object has a number of attributes:
  - **id** is the internal identifier of the category in the ForSight™ platform.
  - **groupId** is the internal identifier of the group the category is associated with.
  - **group** is the name of the group the category is associated with, entered by the user or auto-generated by the system.
  - **name** is the name of the category, entered by the user or auto-generated by the system.
  - **trainingDocs** is the number of training documents that have been added to the category.
  - **status** represents the quality of the current training for this category. Green indicates an excellent amount of training, yellow indicates an acceptable amount of training, and red indicates too little training.
  - **hidden** is a boolean value representing whether or not the category will be hidden in the final results. Hidden categories usually correspond to "not relevant" or "junk" content.
  - **sortOrder** is the order which the categories appear in ForSight including the hidden categories

Monitor Results

The monitor results API endpoint is accessed at https://forsight.crimsonhexagon.com/api/monitor/results. The query-string parameters are:

- **version**: Required; must be equal to 3.
- **id**: Required, must be the id of a valid monitor; specifies which ForSight™ monitor's results should be returned. This id can be obtained from the monitor list API.
- **auth:** Required; must be your assigned authentication token.
- **start** and/or **end**: Optional; specifies start and/or end dates in YYYY-MM-DD format. If either or both are included, the returned results will be limited to those on or after the start date and/or those before the end date (i.e. the end date is exclusive). Please note that for monitors that are real-time enabled, you can request for the latest information by calling this API endpoint with start date of today and end date of tomorrow. Currently results are update once every hour.
- **hideExcluded**: Optional; specifies whether a hidden category should be included in the proportion calculation. By default this parameter is set to false, which means hidden categories are included when calculating the

Example request:

https://forsight.crimsonhexagon.com/api/monitor/results?version=3&id=123456789&start=2012-08-01&end=2012-08-02&auth=YourAuthenticationToken

The response is a JSON-formatted list of monitor results.

Example response for a Buzz monitor:
```
{
  "results":[
    {
      "creationDate":"2012-08-03T18:32:58",
      "startDate":"2012-08-01T00:00:00",
      "numberOfDocuments":61685,
      "categories":[
        {
          "proportion":0.09,
          "category":"Basic Negative",
          "categoryId":123456789,
          "hidden":false
          "volume":5552
        },
        {
          "proportion":0.2,
          "category":"Basic Positive",
          "categoryId":123456780,
          "hidden":false
          "volume":12337
        },
        {
          "proportion":0.71,
          "category":"Basic Neutral",
          "categoryId":123456781,
          "hidden":false
          "volume":43796
        }
      ],
      "endDate":"2012-08-02T00:00:00",
      "numberOfRelevantDocuments":61685
    }
  ],
  "status":"success"
}
```

Example response for an Opinion monitor:
```
{
  "results":[
    {
      "creationDate":"2012-05-01T01:05:15",
      "startDate":"2012-04-30T00:00:00",
      "numberOfDocuments":248,
      "categories":[
```

```
         {
           "proportion":0.53,
           "groupId": 111111111,
           "groupHidden":false,
           "category":"Category Name 1",
           "hidden":false,
           "categoryId":123456789,
           "volume":131,
           "group":"Group Name"
         },
         {
           "proportion":0.23,
           "groupId": 111111111,
           "groupHidden":false,
           "category":"Category Name 2",
           "hidden":false,
           "categoryId":123456780,
           "volume":57,
           "group":"Group Name"
         },
         {
           "proportion":0.24,
           "category":"Off-topic",
           "hidden":true,
           "categoryId":123456781,
           "volume":60
         }
       ],
       "endDate":"2012-05-01T00:00:00",
       "numberOfRelevantDocuments":188
     }
   ],
   "status":"success"
 }
```

The JSON object attributes:

- **status** is the API status, either success or error. See the Errors section above.

- **results** is a JSON array of zero or more results for the monitor, each corresponding to one day. Each result

  has several attributes:

  - **numberOfDocuments** is the total number of posts for all categories including the hidden ones.
  - **startDate** is the starting date (inclusive) for this result, in the dashboard's time zone, in ISO 8601 format (YYYY-MM-DDThh:mm:ss).
  - **endDate** is ending date (exclusive) for this result, in the dashboard's time zone, in ISO 8601 format (YYYY-MM-DDThh:mm:ss). For example, a range of 2010-01-01 to 2010-01-04 means a result for three days (for the 1st, 2nd, and 3rd of January).
  - **creationDate** is the date and time that this result was created, in UTC, in ISO 8601 format (YYYY-MM-DDThh:mm:ss).
  - **categories** is a JSON array of the results for each category. Each categories object has a number of attributes:
    - o **category** is a system-defined or user-entered name of the category of the monitor.
    - o **proportion** is the percentage of posts in this category, based on ForSight[TM]'s algorithm. The sum of the proportions for all categories, including the hidden ones by default, will be 100%. Please note that if there are hidden categories then the proportions returned by this endpoint will

be different from the proportions in the ForSight™'s web interface. If you want to exclude the hidden categories so that the non-hidden categories' proportions add up to 100%, then please use the hideExcluded query parameter mentioned above.

- o **hidden** is either true or false, based on whether the user intended the category's results to be visible. ForSightTM's web interface normally does not display the hidden categories, and renormalizes the proportions of the non-hidden categories to sum to 100%.
- o **categoryId** is a system-defined id of the category of the monitor.
- o **group** is a system-defined or user-entered name of the group for this category if present.
- o **groupId** is a system-defined id of the group for this category if present.
- o **groupHidden** is either true or false, based on whether the user intended the category group's results to be visible. ForSightTM's web interface normally does not display the hidden category group, and renormalizes the proportions of the non-hidden category group to sum to 100%.
- o **volume** is total number of posts in this category.
- **numberOfRelevantDocuments** is the total number of posts for all categories excluding the hidden ones.

Monitor Top Sites and Content Sources

The monitor top sites and content sources API endpoint is accessed at https://forsight.crimsonhexagon.com/api/monitor/sources. The query-string parameters are:

- **version**: Required; must be equal to 3.
- **id**: Required, must be the id of a valid monitor; specifies which ForSight™ monitor's top sites and content sources should be returned. This id can be obtained from the monitor list API.
- **auth:** Required; must be your assigned authentication token.
- **start** and/or **end**: Optional; specifies start and/or end dates in YYYY-MM-DD format. If either or both are included, the returned results will be limited to those on or after the start date and/or those before the end date (i.e. the end date is exclusive). Please note that for monitors that are real-time enabled, you can request for the latest information by calling this API endpoint with start date of today and end date of tomorrow. Currently results are update once every hour.

Example request:

https://forsight.crimsonhexagon.com/api/monitor/sources?version=3&id=123456789&start=2012-08-01&end=2012-08-02&auth=YourAuthenticationToken

The response is a JSON-formatted list of monitor top sites and content sources information.

Example response:

```
{
  "status":"success",
  "contentSources":[
    {
      "startDate":"2012-08-01T00:00:00",
      "topSites":{
        "wetpaint.com":37,
        "facebook.com":370,
        "blogspot.com":111,
        "habboxforum.com":154,
        "zetaboards.com":413,
        "twitter.com":59372,
        "fanmail.biz":37,
        "imdb.com":62,
        "uol.com.br":37,
```

```
          "fanforum.com":31
        },
        "endDate":"2012-08-02T00:00:00",
        "sources":{
          "Blogs":845,
          "Facebook":370,
          "Forums":1098,
          "Twitter":59372
        }
      }
    ]
  }
```

The JSON object attributes:

- **status** is the API status, either success or error. See the Errors section above.

- **contentSources** is a JSON array of zero or more content sources for the monitor. Each object has several attributes:

  - **startDate** is the starting date (inclusive) for this result, in the dashboard's time zone, in ISO 8601 format (YYYY-MM-DDThh:mm:ss).

  - **endDate** is ending date (exclusive) for this result, in the dashboard's time zone, in ISO 8601 format (YYYY-MM-DDThh:mm:ss). For example, a range of 2010-01-01 to 2010-01-04 means a result for three days (for the 1st, 2nd, and 3rd of January).

  - **sources** is a JSON object containing the content sources enabled for the monitor and the number of documents this monitor gathered from each source for the specified date. Content sources may include blogs, forums, news, Twitter, or custom content sources.

  - **topSites** is a JSON object containing a list of the sites with the largest numbers of posts for this monitor for this day. This list will contain up to 10 sites. Note that our count is based on domain name, not the entire URL of a post. That is, blog1.blogspot.com and blog2.blogspot.com will contribute their posts to the blogspot.com count and will not appear in the list.

Monitor Twitter Metrics

The monitor Twitter metrics API endpoint is accessed at https://forsight.crimsonhexagon.com/api/monitor/ twittermetrics. The query-string parameters are:

- **version**: Required; must be equal to 3.

- **id**: Required, must be the id of a valid monitor; specifies which ForSight™ monitor's results should be returned. This id can be obtained from the monitor list API.

- **auth:** Required; must be your assigned authentication token.

- **start** and/or **end**: Optional; specifies start and/or end dates in YYYY-MM-DD format. If either or both are included, the returned results will be limited to those on or after the start date and/or those before the end date (i.e. the end date is exclusive). Please note that for monitors that are real-time enabled, you can request for the latest information by calling this API endpoint with start date of today and end date of tomorrow. Currently results are update once every hour.

Example request:

> https://forsight.crimsonhexagon.com/api/monitor/twittermetrics?version=3&id=123456789&start=2013-09-22&end=2013-09-23&auth=YourAuthenticationToken

The response is a JSON-formatted Twitter Metrics.

Example response:

```
{
  "status":"success",
  "dailyResults":[
    {
      "startDate":"2014-01-17T00:00:00",
      "topHashtags":{
        "#youdrive":3,
        "#followupfri":1,
        "#ipay":1,
        "#perfectcouple":1
      },
      "endDate":"2014-01-18T00:00:00",
      "topRetweets":[
        {
          "author":"jstephens",
          "isOriginal":true,
          "retweetCount":1,
          "date":"2014-01-18T18:05:08",
          "contents":"#youdrink #youdrive #youlose",
          "url":"http://twitter.com/jstephens/status/424603378564759652",
        },
        {
          "author":"iphotott",
          "isOriginal":false,
          "retweetCount":4,
          "date":"2013-02-18T14:15:18",
          "contents":"iphoto is awesome",
          "url":"http://twitter.com/ iphotott /status/4246033734264759652",
        }
      ],
      "topMentions":{
        "@lorzdr":1332
        "@ccccddd":231324
      }
    },
    {
      "startDate":"2014-01-18T00:00:00",
      "topHashtags":{
        "#youdrink":2,
        "#youdrive":2,
        "#youlose":2
      },
      "endDate":"2014-01-19T00:00:00",
      "topRetweets":[
        {
          author: "ddloavato",
          isOriginal: true,
          retweetCount: 290000,
          date: "2014-02-06T00:00:55",
          url: "http://twitter.com/ddloavato/status/4312158937002344416"
        }
      ],
      "topMentions":{
        "@abcdr":1324
        "@234kdr":132424
      }
    }
```

```
        ]
    }
```

The JSON object attributes:

- **status** is the API status, either success or error. See the Errors section above.

- **dailyResults** is a JSON array of zero or more daily results for the monitor. Each dailyResults has several attributes:

  - **startDate** is the starting date (inclusive) for this result, in the dashboard's time zone, in ISO 8601 format (YYYY-MM-DDThh:mm:ss).

  - **endDate** is ending date (exclusive) for this result, in the dashboard's time zone, in ISO 8601 format (YYYY-MM-DDThh:mm:ss). For example, a range of 2010-01-01 to 2010-01-04 means a result for three days (for the 1st, 2nd, and 3rd of January).

  - **topHashtags** contains a list of top hash tags and their total counts per day.

  - **topRetweets** is a JSON array of zero or more top Retweets for the day. Each topRetweets has several attributes:

    - **author** corresponds to the author of the Tweet

    - **isOriginal** if set to true then this Tweet is the first Tweet, if it is set to false then this is the latest Retweet of the first Tweet on this day.

    - **retweetCount** corresponds to the total count of retweets for that Tweet

    - **date** corresponds to the date and time when this Tweet was tweeted, in UTC, ISO 8601 format (YYYY-MM-DDThh:mm:ss).

    - **url** corresponds to original url of the Tweet

  - **topMentions** contains a list of top twitter author mentions and their total counts per day.

Monitor Posts

The monitor posts API endpoint is accessed at https://forsight.crimsonhexagon.com/api/monitor/posts. The query-string parameters are:

- **version**: Required; must be equal to 3.

- **id**: Required, must be the id of a valid monitor; specifies which monitor's posts should be returned. This id can be obtained from the monitor list API.

- **auth:** Required; must be your assigned authentication token.

- **start** and/or **end**: Optional; specifies start and/or end dates in YYYY-MM-DD format. If either or both are included, the returned posts will be limited to those published on or after the start date and/or those before the end date (i.e. the end date is exclusive). Please note that for monitors that are real-time enabled, you can request for the latest information by calling this API endpoint with start date of today and end date of tomorrow. Currently results are update once every hour.

- **extendLimit :** Optional; if it is set to true, then a maximum of 10,000 posts will be returned per call.

- **filter**: Optional; used to narrow in on the type of posts you want. The filter should be a pipe-separated list of field:value pairs, where the value can be a comma-separated list of values. Some examples:

  - filter=type:Twitter

  - filter=authorRank:10|category:123456987654

    - filter=site:blogspot.com,wordpress.com|keywords:android

  There are a limited number of available fields that can be used for filtering. Below are the purpose of each

field and the possible values it can have.

- **author** corresponds to Twitter username of the person that wrote a post. Currently this field is not available for any content source other than Twitter. More than one username can be supplied in a comma-separated list.
    - o **author**:joeschmo
    - o **author**:joeschmo,jane,jack
- **authorRank** corresponds to the rank of a particular Twitter user. Currently this field is not available for any content source other than Twitter. Author ranking scores are provided by Klout.com. Scores range from 0 to 100, with higher numbers indicating more influential users. Posts returned will be from authors of rank equal to or higher than the supplied rank. For instance, the filter authorRank:20 will return Twitter posts from authors with rank greater than or equal to 20. Only one rank can be supplied. You can only filter by authorRank on posts after 2012-12-11, or if you have reset the monitor results after that day. If you attempt to filter by authorRank prior to that date, you will receive an HTTP 400 status with the following error message:
    - o {

        message: "Posts before 2012-12-11T00:00:00 cannot be filtered by authorRank unless results are reset",
        status: "error"

        }
- **category** corresponds to the id of the monitor's categories, which can be obtained via the monitor detail API endpoint. The posts returned will be those most likely to be in the given categories. If no category filter is provided, this field defaults to the set of unhidden categories.
    - o **category**:443349
    - o **category**:3894843,3488229
- **keywords** corresponds to words that appear in the body of the post. Returned posts will be limited to those that contain all the required keywords. Phrases should be surrounded by commas.
    - o **keywords**:android,iphone
    - o **keywords**:android,'apple iphone'
- **language** corresponds to the two-letter ISO 639-1 language code describing the language the post is written in.
    - o **language**:en
    - o **language**:en,zh
- **location** corresponds to the three-letter ISO 3166-1 alpha-3 location code describing the country of the author if a three-letter value is used. If a two-letter value is used, then it corresponds to a state of US.
    - o **location**:USA,CHN
    - o **location:**MA,CA
- **gender** corresponds to the gender of the author, M=male and F=female.
    - o **gender:M**
    - o **gender:F**
- **site** corresponds to the site that published the post. Only top-level websites are valid values for this field. For instance, wordpress.com is valid, but myblog.wordpress.com and wordpress.com/myblog are not. Sites should not be preceded by "www." or "http://".
    - o **site**:cnn.com
    - o **site**:nytimes.com,blogspot.com,cnn.com
- **type** corresponds to the content source of a post. The available types here match those seem on the Content Sources tab on our web interface and those that appear in monitor content sources API endpoint results. For this field, you can supply a comma-separated list strings. Valid Content Sources: Blogs, Forums, News, Facebook, Twitter, Comments, etc. Note that these values are case sensitive.
    - o **type**:Twitter
    - o **type**:Blogs,Forums,Comments

Example request:

> https://forsight.crimsonhexagon.com/api/monitor/posts?version=3&id=123456789&start=2010-01-01&end=2010-01-02&filter=type:Blogs|category:3485732&auth=YourAuthenticationToken

The response is a JSON-formatted list of up to 500 sample posts by default.

Example response:
```
{
  "status":"success",
  "posts":[
    {
      "author":"Joe",
      "title":" I just got a new puppy! ... ",
      "location":"CA, USA",
      "contents":"I just got a new puppy! ... ",
      "assignedCategoryId":1234,
      "language":"en",
      "categoryScores":[
        {
          "categoryId":1234,
          "categoryName":"Likes dogs",
          "score":"1.0"
        },
        {
          "categoryId":5678,
          "categoryName":"Likes cats",
          "score":".456"
        },
        {
          "categoryId":2468,
          "categoryName":"Irrelevant",
          "score":".138"
        }
      ],
      "type":"Twitter",
      "date":"2010-01-01T07:24:50",
      "assignedCategoryName":"Likes dogs",
      "url":"http://twitter.com/example/status/1234",
      "authorFollowers":105,
      "authorFollowing":202,
      "authorKlout"46,
      "authorPosts":4341
    }
  ]
}
```

The JSON object attributes:

- **status** is the API status, either success or error. See the Errors section above.
- **posts** is a JSON array of zero or more sample posts for the monitor. This includes training documents and posts shown on the Explore tab in the ForSight[TM] platform. Each post has several attributes:
    - **title** is the title of the post. Important note: due to the terms of our contract with Twitter, we cannot include this attribute for tweets. As of December 1, 2011, Twitter has an API endpoint https://dev.twitter.com/docs/api/1/get/statuses/show/%3Aid that can be used to get the contents of a Tweet with a given status id. The status id can be obtained from the URL of the tweet, which is provided through our API. The full Twitter API documentation can be found at https://dev.twitter.com/docs.
    - **url** is the post's original URL.

- **date** is the date the post was published, in UTC, in ISO 8601 format (YYYY-MM-DDThh:mm:ss).
- **location** is the location of the person that authored the post, when available.
- **author** is an identifier associated with the person who published the post.
- **language** is an ISO 639-1 language code describing the language the post is written in.
- **type** is the content type of this post. Possible values are: Blogs, Forums, News, Facebook, Twitter, Comments, Flickr, YouTube, Custom, etc.
- **contents** is the body of the post. For longer posts, we may only include the beginning of the body. Important note: due to the terms of our contract with Twitter, we cannot include this attribute for tweets. As of December 1, 2011, Twitter has an API endpoint https://dev.twitter.com/docs/api/1/get/statuses/show/%3Aid that can be used to get the contents of a Tweet with a given status id. The status id can be obtained from the URL of the tweet, which is provided through our API. The full Twitter API documentation can be found at https://dev.twitter.com/docs.
- **categoryScores** is a JSON array containing the scores of this post relative to each of the monitor's categories. The array contains a JSON object for each category. categoryScores may not be present if this document was assigned a category during the monitor training process (before analysis) as opposed to from the sample posts tab (after analysis). Each categoryScores object has three attributes:
  - **categoryId** is the internal identifier of this category in the ForSight^{TM} platform.
  - **categoryName** is the name of this category, chosen by the user that created the monitor.
  - **score** is a string representation of a float between 0 and 1.0, with a higher score representing a higher likelihood that this post belongs in this category. If a human has assigned this post to this category (the **assignedCategory** attributes are present), the score will be 1.0.
- **assignedCategoryId** is the internal identifier of the monitor category, to which the post belongs, in the ForSight^{TM} platform, if any. A post will have an assigned category only if a human has read it and added it to a category.
- **assignedCategoryName** is the name of the monitor category to which the post belongs, if any. This name is chosen by the user who created the monitor. A post will have an assigned category only if a human has read it and added it to a category.
- **authorFollowers** is total number of followers of the Twitter author of this post at the time when this post was posted, when available.
- **authorFollowing** is the total number of Twitter authors the Twitter author of this post was following at the time when this post was posted, when available.
- **authorKlout** is Klout score of the Twitter author of this post at the time this post was posted, when available.
- **authorPosts** is the cumulative total number of posts made by the Twitter author of this post at the time when this post was posted, when available.

Monitor Word Cloud

The monitor wordcloud API endpoint is accessed at https://forsight.crimsonhexagon.com/api/monitor/wordcloud. The query-string parameters are:

- **version**: Required; must be equal to 3.
- **id**: Required, must be the id of a valid monitor; specifies which monitor's posts should be returned. This id can be obtained from the monitor list API endpoint.
- **auth:** Required; must be your assigned authentication token.
- **start** and/or **end**: Optional; specifies start and/or end dates in YYYY-MM-DD format. If either or both are included, the returned posts will be limited to those published on or after the start date and/or those before the end date (i.e. the end date is exclusive). Please note that for monitors that are real-time enabled, you can

- **filter**: Optional; used to narrow in on the type of posts you want. The filter should be a pipe- separated list of field:value pairs as described above in the monitor posts API endpoint.

Example request:

https://forsight.crimsonhexagon.com/api/monitor/wordcloud?version=3&id=123456789&start=2010-01-01&end=2010-01-02&auth=YourAuthenticationToken

The response is JSON-formatted data that can be used to generate a word cloud.

Example response:

```
{
  "status":"success",
  "data":{
    "microsoft":56.35983,
    "apple":78.987844,
    "computer":93.482872,
    "processor":14.934588,
    ...
  }
}
```

The JSON object attributes:

- **status** is the API status, either success or error. See the Errors section above.
- **data** is a JSON object containing 100 pairs of one term and one floating point number between 0 and 100 representing how frequently the term occurs. This number has been scaled to make it useful for font size determination. This data is generated using 300 documents randomly selected from the pool defined by the submitted start, end, and filter parameters. The words included in the response are the 100 words most frequently used in the documents, excluding common English words. Note that we are counting the total number of times each word appears in the documents, not the number of posts in which each word appears.

Monitor Topics

The monitor topics API endpoint is accessed at https://forsight.crimsonhexagon.com/api/monitor/topics. The query-string parameters are:

- **version**: Required; must be equal to 3.
- **id**: Required, must be the id of a valid monitor; specifies which monitor's posts should be returned. This id can be obtained from the monitor list API.
- **auth:** Required; must be your assigned authentication token.
- **start** and/or **end**: Optional; specifies start and/or end dates in YYYY-MM-DD format. If either or both are included, the returned posts will be limited to those published on or after the start date and/or those before the end date (i.e. the end date is exclusive). Please note that for monitors that are real-time enabled, you can request for the latest information by calling this API endpoint with start date of today and end date of tomorrow. Currently results are update once every hour.
- **filter**: Optional; used to narrow in on the type of posts you want. The filter should be a pipe- separated list of field:value pairs as described above in the monitor posts API endpoint.

Example request:

https://forsight.crimsonhexagon.com/api/monitor/topics?version=3&id=123456789&start=2010-01-01&end=2010-01-02&auth=YourAuthenticationToken

The result is JSON-formatted data that contains XML data that can be used to generate a Topics/Circles visualization. Note: you must obtain a third-party software license, not included in the Crimson Hexagon's ForSight™ platform license, to the Topics/Circles visualization in order to display the results from topics endpoint. Please contact your account manager for more information.

Example response:

```
{
    "status":"success",
    "data": "<searchresult>
                    <query>android</query>
                        <document id=\"0\">
                            <field key="date">
                                <value value=\"2010-05-01\"/>
                            </field>
                            ...."
}
```

The JSON object attributes:

- **status** is the API status, either success or error. See the Errors section above.
- **data** is an XML string that can be provided to the Circles visualization tool.

Monitor Authors

ForSight™'s author analysis capability is only available for Twitter data, so this endpoint should only be called for monitors that include Twitter data. The monitor authors API endpoint is accessed at https://forsight.crimsonhexagon.com/api/monitor/authors. The query-string parameters are:

- **version**: Required; must be equal to 3.
- **id**: Required, must be the id of a valid monitor; specifies which ForSight™ monitor's results should be returned. This id can be obtained from the monitor list API endpoint. This monitor must analyze Twitter data.
- **auth:** Required; must be your assigned authentication token.
- **start** and/or **end**: Optional; specifies start and/or end dates in YYYY-MM-DD format. If either or both are included, the returned results will be limited to those on or after the start date and/or those before the end date (i.e. the end date is exclusive). Please note that for monitors that are real-time enabled, you can request for the latest information by calling this API endpoint with start date of today and end date of tomorrow. Currently results are update once every hour.

Example request:

https://forsight.crimsonhexagon.com/api/monitor/authors?version=3&id=123456789&start=2010-01-01&end=2010-01-03&auth=YourAuthenticationToken

The response is a JSON-formatted list monitor author information.

Example response:

```
{
    "authors":[
        {
            "startDate":"2012-12-01T00:00:00",
            "authorRanks":{ },
            "authorDetails:[
                {
```

```
                    following:123,
                    followers:244,
                    username:"twitter_author_name",
                    posts:2352,
                    kloutScore:64,
                    detailsDate:"2012-12-01T00:00:00"
            },
            {
                    following:233,
                    followers:454,
                    username:"twitter_author_name2",
                    posts:235452,
                    kloutScore:12,
                    detailsDate:"2012-12-23T00:00:00"
            }
        ],
        "docsPerAuthor":1.092511,
        "totalImpressions:172513
        "endDate":"2012-12-26T00:00:00",
        "countsByAuthor":{
          "exampleTwitterUser":3,
          "plainJohn":7,
          …
        },
        "numberOfAuthors":227
    }
  ],
  "status":"success"
}
```

The JSON object attributes:

- **status** is the API status, either success or error. See the Errors section above.
- **authors** is a JSON array of zero or more pieces of author data for the monitor. Author data is collected every day, whether the opinion monitor has run or not. Each post has several attributes:
  - **startDate** is the starting date (inclusive) for this result, in the dashboard's time zone, in ISO 8601 format (YYYY-MM-DDThh:mm:ss).
  - **endDate** is ending date (exclusive) for this result, in the dashboard's time zone, in ISO 8601 format (YYYY-MM-DDThh:mm:ss). For example, a range of 2010-01-01 to 2010-01-04 means a result for three days (for the 1st, 2nd, and 3rd of January).
  - countsByAuthor is a JSON object containing the Twitter usernames of the ten most prolific authors for this day, and the number of posts attributed to each of them. The posts included in these counts are those published on date that match this monitor's keywords.
  - **authorRanks** is deprecated and will always return an empty value.
  - **numberOfAuthors** is the total number of unique Twitter users who published tweets matching this monitor's keywords on this day.
  - **docsPerAuthor** is the average number of Tweets published on this day per unique author. Only Tweets matching this monitor's keywords are included in this calculation.
  - **authorDetails** is a JSON object containing the ten highest-ranked Twitter authors for the specified time period. An author may post multiple times during the selected time period; the highest Klout score for this author during this time period is selected. These authors may or may not include those in the **countsByAuthor** object. Each authorDetails object, when available, will contain some or all of the fields below:
    - **following** is the total number of Twitter authors this author was following on the date specified in the detailsDate field

- o **followers** is the total number of Twitter authors following this author on the date specified in the detailsDate field
- o **username** is the username of the this Twitter author
- o **posts** is the cumulative total number of posts made by this author on the date specified in the detailsDate field
- o **kloutScore** is the Klout score of this author on the date specified in the detailsDate field
- o **detailsDate** is the date, in ISO 8601 format (YYYY-MM-DDThh:mm:ss), which all the above metrics are based on.
- • **totalImpressions** is the total possible reach for a topic by summing the followers of each Twitter author for a specified topic and time period.

Training Document Upload

The training document upload API endpoint is accessed at https://forsight.crimsonhexagon.com/api/monitor/train. The query-string parameters are:

- • **version**: Required; must be equal to 3.
- • **id**: Required, must be the id of a valid monitor; specifies which monitor this training document should be added to. This id can be obtained from the monitor list API endpoint.
- • **auth:** Required; must be your assigned authentication token.

The training document upload API endpoint requires an HTTP POST, not a GET. The posted data will consist of the document you want to upload and the IDs of the relevant monitor and category, in JSON format as described below. You can only upload one document at a time. Uploading posts using this endpoint will allow you to use them as training documents for a specific monitor. The post will not appear in your search results or be available as a training document for other monitors. You may have to re-login to see the added training document after the upload.

Example requests:

    wget --no-check-certificate --auth-no-challenge --header="Content-Type: application/json --post-file=document.json "https://forsight.crimsonhexagon.com/api/monitor/train?version=3&id=123456789&auth=YourAuthenticationToken"

    curl -T document.json "https://forsight.crimsonhexagon.com/api/monitor/train?version=3&id=123456789&auth=YourAuthenticationToken

The posted data must be UTF8-encoded JSON data. For example:

```
{
    "monitorid":123456789, "categoryid":6779843, "document": {
        "title": "My day at the fair",
        "date": "2010-04-19T23:14:00", "author": "me",
        "url": "http://www.blog.com/2010/04/19/my-day-at-the-fair",
        "contents": "Today I went to the fair and...",
        "language": "en"
    }
}
```

The JSON object attributes:

- • **monitorid** is the identifier of the monitor for which you are uploading a training document. This id can be obtained from the monitor list API endpoint
- • **categoryid** is the identifier of the category for which you are uploading a training document. This id can be obtained from the monitor detail API endpoint. It must correspond to a category associated with the monitor specified by **monitorid**
- • **document** is the document you want to upload.   Each document has several attributes:

- **title** is the title of the post, article, message, etc. It is used for analysis and displayed in the ForSight™ user interface when showing lists of posts. If the post doesn't have a title, you may want to extract its first few words and use those.
- **date** is the date the post was created (not the date it was uploaded to ForSight™), in UTC, in ISO 8601 format (YYYY-MM-DDThh:mm:ss).
- **author** can be a username, actual name, link to a blog or profile page, etc. The author is not used for analysis but is displayed to the user in the ForSight™ user interface, so you can synthesize a reasonable value (e.g. "Anonymous poster #56789") if a real author name is not available.
- **url** is the URL of the specific post, so the ForSight™ user can navigate to original source site and see the post in context.
- **contents** is the text of the post to be analyzed. It should be no more than 16k characters long. Non-ASCII text is acceptable (accent marks, symbols, multi-byte international characters, etc.); just remember that the entire JSON payload should always be UTF-8 encoded.
- **language** is a two-letter ISO 639-1 language code. If you don't know the language of your posts, or it's not relevant to your analysis (e.g. everything is presumed to be English), just use en for all posts.

Upon successful upload, the API returns an HTTP 200 response code with a JSON-formatted response body.

Example response:

```
{
        "status":"success"
}
```

The JSON object attributes:

- **status** is the API status, either success or error. Possible sources of HTTP 400 errors are missing parameters, malformed dates or URLs, garbled JSON formatting, etc. If an error occurs, the message attribute will indicate the problem.

Content Upload

The content upload API endpoint is accessed at https://forsight.crimsonhexagon.com/api/content/upload. The query-string parameters are:

- **version**: Required; must be equal to 3.
- **auth:** Required; must be your assigned authentication token.

The content upload API requires an HTTP POST, not a GET. The posted data will consist of the documents you want to upload, in JSON format as described below. Once uploaded, the content will be processed and made available to your monitor for analysis (see the Setup section above), please note that the processing time may take up to 6 hours.

Example requests:

```
wget --no-check-certificate --auth-no-challenge --header="Content-Type: application/json --post-
file=YourContentFile.json
"https://forsight.crimsonhexagon.com/api/content/upload?version=3&auth=YourAuthenticationToken"
curl -T YourContentFile.json
"https://forsight.crimsonhexagon.com/api/content/upload?version=3&auth=YourAuthenticationToken"
```

The posted data must be UTF8-encoded JSON data. For example:

```
{
  "items":[
```

```
    {
      "title":"Example Title",
      "date":"2010-01-26T16:14:00",
      "author":"me",
      "url":"http://www.crimsonhexagon.com/post1",
      "contents":"Example content",
      "language":"en",
      "type":"Your_Assigned_Content_Type_Name"
    },
    {
      "title":"Example Title 2",
      "date":"2010-01-26T16:14:01",
      "author":"me",
      "url":"http://www.crimsonhexagon.com/post2",
      "contents":" Example content 2",
      "language":"en",
      "type":"Your_Assigned_Content_Type_Name"
    }
  ]
}
```

The JSON object has one attribute, items, a JSON array of one or more content items to add to the system. No more than 1,000 items can be uploaded at a time (though for practical purposes it may be better to use a much smaller number, for example to make debugging easier in case there are errors in the data).

There are 6 required attributes of each item:

- **title** is the title of the post, article, message, etc. It is included in analysis and displayed in the ForSight[TM] user interface when showing lists of posts. If your data doesn't have actual titles, then supply something equivalent that will be meaningful to the user. (For example, a Twitter status update could be titled "Post from @somebody".)

- **date** is the date the post was created (not the date is was uploaded to ForSight[TM]), in UTC, in ISO 8601 format (YYYY-MM-DDThh:mm:ss). ForSight[TM] always analyzes content within a specific date range (typically one day at a time, or longer periods for lower-volume content), so correct dates are required to be able to analyze posts over time.

- **author** can be a username, actual name, link to a blog or profile page, etc. The author is not used for analysis but is displayed to the user in the ForSight[TM] user interface, so you can synthesize a reasonable value (e.g. "Anonymous poster #56789") if a real author name is not available.

- **url** is the URL of the specific post, so the ForSight[TM] user can navigate to original source site and see the post in context. Each post or document must have a unique URL for a given content type code. It's likely that posts uploaded with the content API will not have URLs at all (for offline content or processed content) or have URLs that aren't navigable (for private content). Since a syntactically-valid URL is required for each post, Crimson Hexagon recommends synthesizing unique URLs in these cases, based on some logical structure of your content. For example, if you're uploading responses to multiple customer surveys, you might use URLs like http://mycompany.com?survey=survey1&post=post12345. The URLs would not actually exist at mycompany.com, but would simply serve to partition your uploaded content. When setting up a monitor in the ForSight[TM] user interface, you could then include keyword terms to limit analysis to only some of your posts, e.g. **url**:survey1 to only find posts from the first survey.

- **contents** is the text of the post to be analyzed. It should be no more than 16k characters long. Non-ASCII text is acceptable (accent marks, symbols, multi-byte international characters, etc.); just remember that the entire JSON payload should always be UTF-8 encoded.

- **language** is a two-letter ISO 639-1 language code. If you don't know the language of your posts, or it's not relevant to your analysis (e.g. everything is presumed to be English), just use en for all posts.

- **type** must be one of the content type names supplied to you by Crimson Hexagon when your API access was provisioned. As described above, each content type name is one-to-one associated with a checkbox in the ForSight™ user interface, and can be used only by your company.

Upon successful upload, the API returns an HTTP 200 response code with a JSON-formatted response.

Example response:
```
{
        "status":"success"
        "uploadCount":123
}
```

The JSON object attributes:

- **status** is the API status, either success or error. See the Errors section above. Possible sources of HTTP 500 errors are missing parameters, malformed dates or URLs, garbled JSON formatting, etc. If an error occurs, the message attribute will indicate the problem and where possible the specific item number.

- **uploadCount** is the number of items uploaded, and is a simple way to confirm that the API understood your request.

Twitter Social Monitor – Sent Posts

The Twitter Social Monitor - Sent Posts API endpoint is accessed at https://forsight.crimsonhexagon.com/api/monitor/twittersocial/sentposts. The query-string parameters are:

- **version**: Required; must be equal to 3.
- **id**: Required, must be the id of a valid monitor; specifies which ForSight™ monitor's results should be returned. This id can be obtained from the monitor list API.
- **auth:** Required; must be your assigned authentication token.
- **start** and/or **end**: Optional; specifies start and/or end dates in YYYY-MM-DD format. If either or both are included, the returned results will be limited to those on or after the start date and/or those before the end date (i.e. the end date is exclusive). Please note that for monitors that are real-time enabled, you can request for the latest information by calling this API endpoint with start date of today and end date of tomorrow. Currently results are update once every hour.

Example request:

https://forsight.crimsonhexagon.com/api/monitor/twittersocial/sentposts?version=3&id=123456789&start= 2014-04-03&end=2014-04-04&auth=YourAuthenticationToken

The response is a JSON-formatted Twitter Metrics.

Example response:
```
{
  "dailyResults": [
    {
      "startDate": "2014-04-03T00:00:00",
      "endDate": "2014-04-04T00:00:00",
      "sentPostMetrics": [
        {
          "url": "http://twitter.com/9to5mac/status/451615136910802944",
          "date": "2014-04-03T07:00:13",
          "retweets": 100,
```

```
            "replies": 11,
            "impressions": 272839
          },
          {
            "url": "http://twitter.com/9to5mac/status/451823036413579266",
            "date": "2014-04-04T00:05:01",
            "retweets": 21,
            "replies": 2,
            "impressions": 293607
          }
        ],
        "totalImpressions": 5235202
      }
    ],
    "status": "success"
}
```

The JSON object attributes:

- **status** is the API status, either success or error. See the Errors section above.

- **dailyResults** is a JSON array of zero or more daily results for the monitor. Each dailyResults has several attributes:

    - **startDate** is the starting date (inclusive) for this result, in the dashboard's time zone, in ISO 8601 format (YYYY-MM-DDThh:mm:ss).

    - **endDate** is ending date (exclusive) for this result, in the dashboard's time zone, in ISO 8601 format (YYYY-MM-DDThh:mm:ss). For example, a range of 2010-01-01 to 2010-01-04 means a result for three days (for the 1st, 2nd, and 3rd of January).

    - **totalImpressions** is total number of possible impressions for this date for all of the Tweets sent on this date

    - **sentPostMetrics** is a JSON array of zero or more sent posts. Each sentPostMetrics has several attributes:

        - **url** is the url of the Tweet

        - **date** is the date when the Tweet was posted, in UTC, in ISO 8601 format (YYYY-MM-DDThh:mm:ss).

        - **retweets** is the total number of Retweets for this Tweet for this date

        - **replies** is the total number of Replies for this Tweet for this date

        - **impressions** is the total number of possible impressions for this date for this Tweet

Twitter Social Monitor – Total Engagement

The Twitter Social Monitor – Total Engagement API endpoint is accessed at https://forsight.crimsonhexagon.com/api/monitor/twittersocial/totalengagement. The query-string parameters are:

- **version**: Required; must be equal to 3.

- **id**: Required, must be the id of a valid monitor; specifies which ForSight[TM] monitor's results should be returned. This id can be obtained from the monitor list API.

- **auth:** Required; must be your assigned authentication token.

- **start** and/or **end**: Optional; specifies start and/or end dates in YYYY-MM-DD format. If either or both are included, the returned results will be limited to those on or after the start date and/or those before the end date (i.e. the end date is exclusive). Please note that for monitors that are real-time enabled, you can request for the latest information by calling this API endpoint with start date of today and end date of tomorrow. Currently

Example request:

> https://forsight.crimsonhexagon.com/api/monitor/twittersocial/totalengagement?version=3&id=123456789
> &start=2014-04-03&end=2014-04-04&auth=YourAuthenticationToken

The response is a JSON-formatted Twitter Metrics.

Example response:
```
{
   "dailyResults": [
      {
         "startDate": "2014-04-03T00:00:00",
         "endDate": "2014-04-04T00:00:00",
         "mentions": 118,
         "replies": 54,
         "retweets": 653
      }
   ],
   "status": "success"
}
```

The JSON object attributes:

- **status** is the API status, either success or error. See the Errors section above.

- **dailyResults** is a JSON array of zero or more daily results for the monitor. Each dailyResults has several attributes:

  - **startDate** is the starting date (inclusive) for this result, in the dashboard's time zone, in ISO 8601 format (YYYY-MM-DDThh:mm:ss).

  - **endDate** is ending date (exclusive) for this result, in the dashboard's time zone, in ISO 8601 format (YYYY-MM-DDThh:mm:ss). For example, a range of 2010-01-01 to 2010-01-04 means a result for three days (for the 1st, 2nd, and 3rd of January).

  - **mentions** is the total number of mentions of this Tweet author for this date

  - **replies** is the total number of Replies to this Twitter author for this date

  - **retweets** is the total number of Retweets of this Twitter author for this date

Twitter Social Monitor – Followers

The Twitter Social Monitor – Followers API endpoint is accessed at https://forsight.crimsonhexagon.com/api/monitor/twittersocial/followers. The query-string parameters are:

- **version**: Required; must be equal to 3.

- **id**: Required, must be the id of a valid monitor; specifies which ForSight^{TM} monitor's results should be returned. This id can be obtained from the monitor list API.

- **auth:** Required; must be your assigned authentication token.

- **start** and/or **end**: Optional; specifies start and/or end dates in YYYY-MM-DD format. If either or both are included, the returned results will be limited to those on or after the start date and/or those before the end date (i.e. the end date is exclusive). Please note that for monitors that are real-time enabled, you can request for the latest information by calling this API endpoint with start date of today and end date of tomorrow. Currently results are update once every hour.

Example request:

> https://forsight.crimsonhexagon.com/api/monitor/twittersocial/followers?version=3&id=123456789
> start=2014-04-03&end=2014-04-04=2014-04-03&end=2014-04-04&auth=YourAuthenticationToken

The response is a JSON-formatted Twitter Metrics.

Example response:

```
{
   "dailyResults": [
      {
         "date": "2014-04-03T00:00:00",
         "followers": 209827
      }
   ],
   "status": "success"
}
```

The JSON object attributes:

- **status** is the API status, either success or error. See the Errors section above.

- **dailyResults** is a JSON array of zero or more daily results for the monitor. Each dailyResults has several attributes:

  - **date** is the date, in UTC, in ISO 8601 format (YYYY-MM-DDThh:mm:ss) for the follower count result.

  - **followers** is the total number of followers as of date in the date element.