

Projet ROSES

Programme MDCO – Edition 2007

Livrable no D3.1

Blastfeed REST API Specification

Identification

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Résumé

This document describes the Blastfeed REST API to open the Blastfeed platform to third party applications.

Modifications

Date	What
2008-05-28	First version, Draft 0.1. Authentication and signing HTTP requests. Creating, editing and deleting channels.

Introduction

The Blastfeed REST API allows third party application and websites to access and use the services provided by the Blastfeed platform to enrich the services they provide.

The API is accessible through the `api.blastfeed.com` server.

In order to have access to the Blastfeed API you need an API key provided by 2or3things. Please contact patrick@2or3things.com.

Credentials

All API calls must be signed to validate the identity of the caller.

To sign an API call a client must add a bf-signature header to the http call. The bf-signature must contain the following information:

login:md5(<api_key>:<date>:md5(<HTTP message body>))

The **api_key** parameter is the API key provided by Blastfeed to the client.

The **date** parameter is the date at which the message is issued in rfc1123 format. You **MUST** also provide a Date header with the date used for signing the message. The server will reject request that do not include a date within 15 minutes of the server date-time.

The **HTTP message body** is the exact sequence of bytes transmitted by the client as body of the HTTP message. In practice, as all messages must be encoded using the UTF-8 encoding, you should provide the md5 of your HTTP message body encoded using UTF-8.

Example:

Imagine the following message is issued at 13:06:23 on the May 28th 2007 London time by a client with the api key 071320966186e6a895dd1ad7371211a933ac4f1b:

```
<?xml version="1.0" encoding="UTF-8" ?>
<channel>
  <feeds>
    <feed url="http://www.techcrunch.com/feed" />
    <feed url="http://feeds.feedburner.com/readwriteweb" />
  </feeds>
  <criteria>
    <anywhere operator="OR">google yahoo microsoft</anywhere>
  </criteria>
</channel>
```

To build the HTTP message we will first calculate the signature:

api_key = 071320966186e6a895dd1ad7371211a933ac4f1b

date = Mon, 28 May 2007 13:06:23 GMT

md5(<HTTP message body>: f5f246a553dab3fe6fd4b74a354f2c3a

md5("071320966186e6a895dd1ad7371211a933ac4f1b:Mon, 28 May 2007 13:06:23
GMT:f5f246a553dab3fe6fd4b74a354f2c3a") = c025a1ea5473dce3cc65c4ae14062e9f

bf-signature = [client@host.com:c025a1ea5473dce3cc65c4ae14062e9f](#)

The complete HTTP Message will be something like

Accept: */*

Host: api.blastfeed.com

Date: Mon, 28 May 2007 13:06:23 GMT

bf-signature = client@host.com:c025a1ea5473dce3cc65c4ae14062e9f

<?xml version="1.0" encoding="UTF-8" ?>

<channel>

<feeds>

<feed url="http://www.techcrunch.com/feed" />

<feed url="http://feeds.feedburner.com/readwriteweb" />

</feeds>

<criteria>

<anywhere operator="OR">google yahoo microsoft</anywhere>

</criteria>

</channel>

Creating a channel

A channel consists on a set of RSS feeds and the words needed to sift them through. To create a channel you must send a message to <http://api.blastfeed.com/channel/create> with the following structure:

```
<?xml version="1.0" encoding="UTF-8" ?>
<channel>
  <feeds>
    <feed url="http://www.techcrunch.com/feed" />
    <feed url="http://feeds.feedburner.com/readwriteweb" />
  </feeds>
  <criteria>
    <anywhere operator="OR">google yahoo microsoft</anywhere>
  </criteria>
</channel>
```

The client will receive in return the new channel created:

```
<?xml version="1.0" encoding="UTF-8" ?>
<channel>
  <id>1063</id>
  <feed
url="http://www.blastfeed.com/channel/feed/1063?k=9fc97208ae3b19280a9cd0621060fb433bbec23
3"/>
</channel>
```

Editing a channel

A message should be sent to <http://api.blastfeed.com/channel/edit/<id>>, where <id> is the id of the channel the client want to edit.

The format of the edit channel message is the same as the create channel message.

Deleting a channel

A message should be sent to <http://api.blastfeed.com/channel/delete>, where <id> is the id of the channel the client wants to delete. The message must contain the following information:

<channel>

<id>1063</id>

<feed

url="http://www.blastfeed.com/channel/feed/1063?k=9fc97208ae3b19280a9cd0621060fb433bbec233"/>

</channel>

Errors

In case an error occurs, a message will be returned by the server with the following format:

```
<?xml version="1.0" encoding="UTF-8" ?>
```

```
<error>
```

```
  <code>Blastfeed.PlanExceeded</code>
```

```
  <message>You reached your plan limits (50 feeds per channel)</message>
```

```
</error>
```

The list of errors that might be returned by Blastfeed follow:

Blastfeed Error code	HTTP Response Status
Blastfeed.InternalError	500
Blastfeed.InvalidArgument	400
Blastfeed.InvalidHttpHeader	400
Blastfeed.InvalidXml	400
Blastfeed.InvalidMessageStructure	400
Blastfeed.PlanExceeded	409
Blastfeed.InvalidSignature	401
Blastfeed.ExpiredMessage	400
Blastfeed.NotFound	404