MBTA

MBTA-REALTIME RSS DOCUMENTATION (V 2.0)

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1. MBTA OPEN DATA OVERVIEW

The MBTA publishes the following data feeds about its service:

- **GTFS Schedule.** The full schedule of all MBTA service in the industry's leading format.

- **MBTA-realtime API.** Full-featured easy-to-use RESTful API with alert, vehicle location, and arrival prediction data (as well as access to schedule data).

- **GTFS-realtime.** Alert, vehicle location, and arrival-prediction data in a new standard format. Best for retrieving data for the whole system at once in a relatively small package, but must be extrapolated using GTFS data to be meaningful.

- **NextBus API.** MBTA bus location and prediction data is available through NextBus's industry-leading API. (Bus only.)

- **RSS alerts.** An easy way to add alert information to anything with an RSS reader.

Concepts, keys and IDs are consistent across data feeds wherever possible. This list does not include several older standalone real-time data feeds, which are deprecated.

This document covers RSS Alerts. GTFS, GTFS-realtime, the MBTA-realtime API, and the RSS alert feed documentation are available at http://realtime.mbta.com . NextBus API documentation is available from NextBus.

1.1 Use of MBTA data

Access to the MBTA GTFS-realtime feeds is governed by the language in the MassDOT Developers License Agreement (http://www.eot.state.ma.us/developers/) in addition to the following conditions:

- The MBTA reserves the right to suspend the data feed, modify the feed, or modify elements of the feed at any time at the MBTA's sole and absolute discretion.

- The MBTA does not guarantee any technical support of any kind to users.

- No user may execute polling commands more often than every 10 seconds. A user that polls more often than that or otherwise overtaxes the MBTA's system may be suspended or terminated from the data feed.

1.2 Getting help

More documentation is available at http://realtime.mbta.com .

The MBTA is happy to answer developer questions at developer@mbta.com . Developers are also encouraged to join the MBTA Developers discussion forum at https://groups.google.com/forum/?fromgroups#!forum/massdotdevelopers .

2. RSS ALERT FEED OVERVIEW

MBTA provides service alerts in RSS feed format. While the API and GTFS-realtime provide richer data sets, RSS can provide an easy way to drop alerts into some existing applications.

2.1 Format Documentation

The RSS feed conforms to version 2.0.11 of the RSS 2.0 specification, as available at http://www.rssboard.org/rss-specification.

2.2 Accessing the Feed

The feed is available at:

```
http://realtime.mbta.com/alertsrss/rssfeed4
```

In addition to the rules stipulated in section 1.1: No user may execute polling command on the RSS feed more often than every 1 minute. A user that polls more often than that or otherwise overtaxes the MBTA's system may be suspended or terminated from the data feed.

2.3 Feed Format

The following three tables show the fields in the root and in the RSS items. When an alert is closed (because a disruption has ended) it is not removed from the feed right away. Instead for 15 minutes the item is changed to one stating that the problem has been resolved. So in the following tables, items for active alerts and items for closed alerts are described separately.

2.3.1   FEED ROOT

Name	Description
Rss	Root element of the response document
Version	Attribute of the root element The version number of the RSS specification that the feed conforms to Data type: String Value: "2.0"
Channel	Child element of the root element Contains information about the channel
Title	Child element of the "channel" element The name of the channel Data type: String Value: "T-Alerts"
Link	Child element of the "channel" element The link for the channel Data type: String representation of a link Value: "http://www.mbta.com/rider_tools/transit_updates/"
Description	Child element of the "channel" element The description for the channel Data type: String Value: "MBTA Service Alerts"
Language	Child element of the "channel" element The language the channel is written in Data type: String Value: : "en-us"
pubDate	Child element of the "channel" element The time the feed wad last updated in RFC 822 format Data type: String representation of a datetime Example: "Sun, 05 May 2013 03:26:17 GMT"
Generator	Child element of the "channel" element The program used to generate the channel Data type: String Value: "MBTA-realtime http://realtime.mbta.com"
Webmaster	Child element of the "channel" element The email address for person responsible for technical issues relating to channel Data type: String representation of an email address Value: "developer@mbta.com"
Ttl	Child element of the "channel" element Number of minutes that indicates how long the channel can be cached before refreshing from the source Data type: Integer Value: "10"
Item	Child element of the "channel" element Contains information about a single alert

2.3.2   ACTIVE ALERT ITEMS

Name	Description
Title	Child element of the "item" element A brief summary of the situation (GTFS-realtime-compatible) Data type: String Example: "Shuttle buses replacing Red Line service from Sat Jun 01, 2013 to Sun Jun 30, 2013 every Saturday and Sunday from 09:00 PM to end of service due to tie replacement"
Link	Optional Child element of the "item" element The link for the alert Data type: String representation of a link Value: "http://mbta.com/about_the_mbta/t_projects/"
Description	Child element of the "item" element Additional details for the alert (GTFS-realtime-compatible) Data type: String (note: tags are added for line breaks) Example: "Affected stops: Alewife Station Davis Station Porter Square Station Harvard Square Station"
Category	Child element of the "item" element The names of the modes or the elevator/escalator type affected Data type: String Example: "Subway", "Elevator"
Guid	Child element of the "item" element The unique identifier for the alert Data type: String Example: "T-Alert ID 781"
isPermaLink	Attribute of the "guid" element Indicates whether the guid can be assumed to a url Data type: String Value: "false"
Pubdate	Child element of the "item" element The time the alert was last updated in RFC 822 format Data type: String representation of a datetime Example: "Fri, 03 May 2013 17:28:05 GMT"

2.3.3 CLOSED ALERTS ITEMS

Name	Description
Title	Child element of the "item" element A brief summary of the situation (GTFS-realtime-compatible) Data type: String Example: "All clear (Shuttle buses replacing Red Line service from Sat Jun 01, 2013 to Sun Jun 30, 2013 every Saturday and Sunday from 09:00 PM to end of service due to tie replacement)"
Category	Child element of the "item" element The names of the modes or the elevator/escalator type affected Data type: String Example: "Subway", "Elevator"
Guid	Child element of the "item" element The unique identifier for the alert Data type: String Example: "T-Alert ID 781"
isPermaLink	Attribute of the "guid" element Indicates whether the guid can be assumed to a url Data type: String Value: "false"
Pubdate	Child element of the "item" element The time the alert was last updated in RFC 822 format Data type: String representation of a datetime Example: "Fri, 03 May 2013 17:28:05 GMT"

2.4 Tips

Presenting all alerts in the feed to a user will probably be overkill. Many RSS readers contain the ability to filter by category. Use this feature to single out the alerts that will be relevant to your users.

If you are finding that the RSS feed isn't meeting your needs, try the MBTA-realtime API, which offers a much richer dataset.

3. FEED SAMPLE

Request:

http://realtime.mbta.com/alertsrss/rssfeed4

Response:

```xml
<rss version="2.0">
      <channel>
            <title>T-Alerts</title>
            <link>http://www.mbta.com/rider_tools/transit_updates/</link>
            <description>MBTA Service Alerts</description>
            <pubDate>Mon, 06 May 2013 21:46:14 GMT</pubDate>
            <language>en-us</language>
            <generator>MBTA-realtime http://realtime.mbta.com</generator>
            <webMaster>developer@mbta.com</webMaster>
            <ttl>10</ttl>
            <item>
                  <title>
Porter Square Station closed from Sat May 11, 2013 through Sun May 12, 2013 due to
construction
                  </title>
                  <description>Affected services:<br/>Fitchburg/South Acton
Line</description>
                  <category>Commuter Rail</category>
                  <guid isPermaLink="false">T-Alert ID 780</guid>
                  <pubDate>Fri, 03 May 2013 17:27:02 GMT</pubDate>
            </item>
            <item>
                  <title>
Shuttle buses replacing Red Line service from Sat Jun 01, 2013 to Sun Jun 30, 2013
every Saturday and Sunday from 09:00 PM to end of service due to tie replacement
                  </title>
                  <description>
Affected stops:<br/>Alewife Station<br/>Davis Station<br/>Porter Square
Station<br/>Harvard Square Station
                  </description>
                  <category>Subway</category>
                  <guid isPermaLink="false">T-Alert ID 781</guid>
                  <pubDate>Fri, 03 May 2013 17:28:05 GMT</pubDate>
            </item>
            <item>
                  <title>
Elevator 849 RUGGLES - Commuter Rail Platform to Lobby out of service from Wed May 08,
2013 at 05:00 PM to Thu May 09, 2013 at 10:00 AM due to electrical work
                  </title>
                  <description>
Please contact station personnel or conductor for assistance. For inbound commuter
rail riders, please disembark at Back Bay and return to Ruggles via the Orange Line.
<br/><br/>For outbound customers, please take the Orange Line to Back Bay and board
the commuter rail at Back Bay. Please contact station personnel for assistance.
                  </description>
                  <category>Elevator</category>
                  <guid isPermaLink="false">T-Alert ID 783</guid>
                  <pubDate>Fri, 03 May 2013 17:30:01 GMT</pubDate>
            </item>
      </channel>
</rss>
```

4. ABOUT THIS DOCUMENT

4.1   Version History

Version #	Date	Change Author	Description of Change
2.0	2014/08/04	Dave Barker	• Reorganized documentation into separate documents for GTFS, GTFS-realtime, MBTA-realtime API, and RSS.