Midnight Train to DeKalb Station

How Drupal Will Help Millions of New Yorkers Get Home on Time

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Building Solutions for...

Fortune 500, government & large not-for-profits
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Fortune 500, government & large not-for-profits
Community Training & Support
Flattening the Drupal Learning Cliff

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Hello.
I'm Blinky.

What's Your Name?
“In the autumn of 1817, the Thomsons and their three associates placed a notice in New York's newspapers. In order to furnish frequent and regular conveyances for GOODS and PASSENGERS, they announced, the subscribers have undertaken to establish a line of vessels between NEW YORK and LIVERPOOL, to sail from each place on a certain day in every month throughout the year.

Thompson and his partners were promising a daring combination of speed, comfort and predictability - qualities previously unknown on the North Atlantic.”
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Early Solutions & Prototypes
INTERBOROUGH
RAPID TRANSIT CO
TO ALL TRAINS
1970’s
1980’s
L
LL
BROOKLYN
1 Min
Delay
Subway Real-Time Data Feeds (Beta)

The MTA wants you to build great tools for our riders.

Now you can use real-time subway data for your website, feed reader, or application. We provide our information in the General Transit Feed Specification (GTFS-realtime) format.

Our data feeds are FREE to use.

To use our logos, maps, symbols or other intellectual property, you need a license. We've put together a simple, easy-to-understand developer package for licensing our identity for use in your project.

To use any of our resources, you must abide by our usage guidelines.

How Do I Get Started?

To access our subway real-time data feeds, you need a developer's API key.

Register here to get your key.

Once you have your key, you can access our real-time data feed.

You don't need a key to access any of our other data feeds, including:

- NYC Transit Subway Schedules & Stations
- NYC Transit Bus Schedules
-

Get Access To Our Data Feeds

- Subway Real-time data feeds (beta) and API documentation
- All MTA Data Downloads (and API documentation)
- Usage Guidelines (required)
- Intellectual Property License (optional)

View Our Sample App!

Want to dive right into the code? We've developed a sample web app that will show you how to access MTA’s real-time and static feeds, then make use of this information. Check it out.
Passengers entering the subway system:

Average Weekday
2009: 5,086,833
2010: 5,156,913
2011: 5,284,295

Annual Total
2009: 1,579,866,600
2010: 1,604,198,017
2011: 1,640,434,672
Feed Documentation

- Register For Feeds
- Feed Documentation

The documentation for real-time APIs can be found by selecting the API you are interested in from our list of real-time data feeds.

- The documentation for static APIs can be found on the Developer Resources Download page.

- Your use of our feeds is governed by the terms of our usage guidelines. Applications that do not stay within these guidelines may be blocked from accessing our APIs.

- See our GTFS-realtime Reference for the New York City Subway for examples of how to access the feeds in your application. Download the nyct-subway.proto file to compile the protocol buffers objects to read the real-time subway feed.

- Learn more about the GTFS-realtime format used by MTA feeds.

- We've put together a simple, easy-to-understand developer package for licensing our intellectual property for use in your project.

Using MTA's Intellectual Property

To access our data feeds, you need a developer's API key. You must register with the MTA to obtain this key, and you will use it in any application that access MTA feeds.

Register Now To Get Your Key

Already registered?

View Our Sample App!

Want to dive right into the code? We've developed a sample web app that will show you how to access MTA's real-time and static feeds, then make use of this information. Check it out.
Solution

MTA

Heart

Drupal
# Proactive Coordination

<table>
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<tr>
<th>Legend</th>
<th>(R) Responsible - does the work</th>
<th>(A) Accountable/Approver - owner, answerable for completion, only one</th>
<th>(C) Consulted/Contributor - provides input</th>
<th>(I) Informed - kept updated</th>
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Project plan
Implementation at a glance

- Drupal 7
- Varnish
- Heavy caching
- Widely used Contributed modules
- 5 custom modules
- Permissions open, not moderated
- Static feeds and Dynamic feeds via GTFS real time data binary file
Line feeds portal architecture

1. **Feed Registration**
   - **User login**
     - Username (*required*)
     - Password (*required*)
     - *Create new account*
     - *Request new password*
   - **Login**

2. **Wrapping**
   - **Drupal**
   - **Data Payload** (TTL 30s)
   - **Analytics Beacon** (TTL 5s)

3. **API Consumers**
   - **Varnish**

4. **GTFS Realtime File Object**
   - **ESI**
   - **Siri Web Service (xml/json)**

5. **Analytics Service**
   - **ESI**

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**Phase 1 Scope**

- MTA Users
- Canned Reports
- On Demand Queries

**Phase 2 Scope**

- Developers
- API Consumers
SOASTA Distributed Load Testing
SOASTA Distributed Load Testing

5,000 users per second!
The Demo ‘App’

Easy

- standalone Drupal 7 Site
- mobile web theme specifically for iPhone
- admin menu, ctools, devel, features, feeds, job scheduler, memcache, strong arm, shield

Not that Easy

No php parser for gtfs files - edited drslump library - built for php 5.3 using namespaces - tweeks to make it work on 5.2
Thank You.

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