

HTTParty

Rubygems

- Many plugins/additions to Ruby available

The screenshot shows the RubyGems.org website. The browser address bar displays 'rubygems.org'. The website header features the 'RubyGems.org' logo with the tagline 'your community gem host', and buttons for 'all gems', 'sign in', and 'sign up'. A search bar is also present. The main content area highlights '1,471,401,499 downloads' and a 'Welcome to your community RubyGem host' message. Below this, there are two columns: 'LEARN' with links to 'Install RubyGems 2.0.3', 'Browse the Guides', and 'Gem Specification'; and 'SHARE' with terminal commands for updating, building, and pushing gems. A footer section provides a brief description of the service and links to help, guides, blog, and contribute.

RubyGems.org | your x

← → ↻ rubygems.org

RubyGems.org
your community gem host

all gems sign in sign up

Search gems...

1,471,401,499 downloads
of 54,373 gems cut since July 2009

Welcome to your community RubyGem host.
Find your gems easier, publish them faster, and have fun doing it.

LEARN

Install RubyGems 2.0.3
Ruby's premier packaging system

Browse the Guides
In depth explanations, tutorials, and references

Gem Specification
Your gem's interface to the world

SHARE

gem update --system
Update to the latest RubyGems version

gem build foo.gemspec
Build your gem

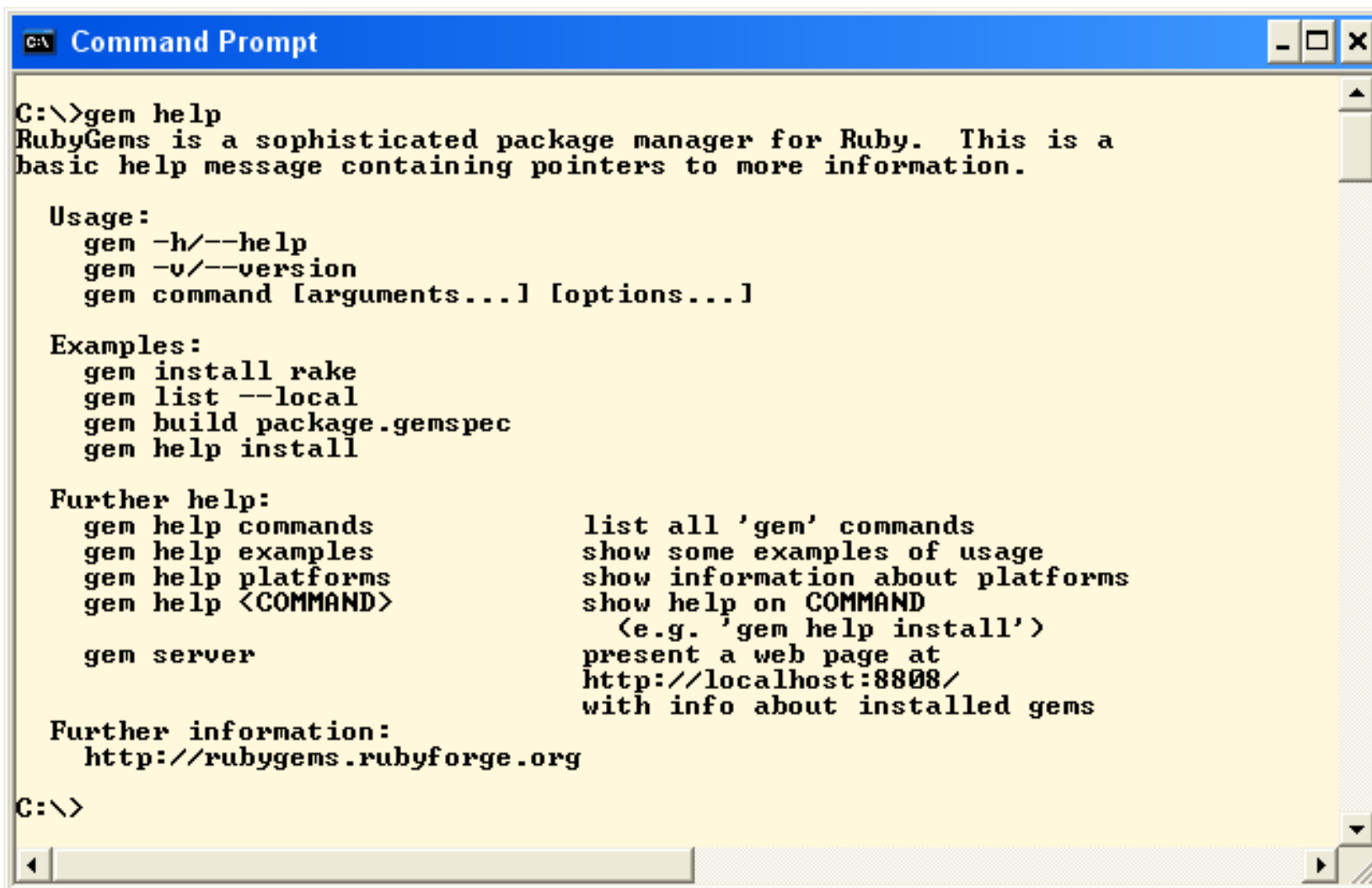
gem push foo-1.0.0.gem
Deploy your gem instantly

RubyGems.org is the Ruby community's gem hosting service. **Instantly publish** your gems and install them. **Use the API** to interact and find out more information about available gems. **Become a contributor** and enhance the site with your own changes.

Help Guides Blog Contribute

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Rubygems



```
C:\>gem help
RubyGems is a sophisticated package manager for Ruby. This is a
basic help message containing pointers to more information.

Usage:
  gem -h/--help
  gem -v/--version
  gem command [arguments...] [options...]

Examples:
  gem install rake
  gem list --local
  gem build package.gemspec
  gem help install

Further help:
  gem help commands      list all 'gem' commands
  gem help examples      show some examples of usage
  gem help platforms     show information about platforms
  gem help <COMMAND>     show help on COMMAND
                        (e.g. 'gem help install')
  gem server             present a web page at
                        http://localhost:8808/
                        with info about installed gems

Further information:
  http://rubygems.rubyforge.org

C:\>
```

Installing HTTParty

```
C:\>gem list httparty

*** LOCAL GEMS ***

httparty (0.10.0)

C:\>gem uninstall httparty
Remove executables:
  httparty

in addition to the gem? [Yn]  Y
Removing httparty
Successfully uninstalled httparty-0.10.0

C:\>gem install httparty
Fetching: multi_xml-0.5.3.gem (100%)
Fetching: httparty-0.10.2.gem (100%)
When you HTTParty, you must party hard!
Successfully installed multi_xml-0.5.3
Successfully installed httparty-0.10.2
2 gems installed
Installing ri documentation for multi_xml-0.5.3...
Installing ri documentation for httparty-0.10.2...
Installing RDoc documentation for multi_xml-0.5.3...
Installing RDoc documentation for httparty-0.10.2...
```

More details on the gem command

- Use `-d` option to get more details

```
C:\>gem list http -d

*** LOCAL GEMS ***

httparty (0.10.2)
  Authors: John Nunemaker, Sandro Turriate
  Homepage: http://jnunemaker.github.com/httparty
  Installed at: C:/RailsInstaller/Ruby1.9.3/lib/ruby/gems/1.9.1

  Makes http fun! Also, makes consuming restful web services dead
  easy.
```

HTTParty gem

- Restful web services client
- Provides support for
 - Basic http authentication
 - Default request query parameters
 - **Automatic parsing of JSON and XML into ruby hashes based on response content-type**

What are Restful Web Services?

- We'll be taking a closer look at REST later in the semester, but for now...
- Simple web services implemented using HTTP (and principles of REST) that
 1. Have a base URI
 2. Support a data exchange format like XML or JSON (and possibly others)
 3. Support a set of HTTP operations

Lots of restful APIs out there...

The screenshot shows the ProgrammableWeb.com website. The browser address bar displays "www.programmableweb.com/apis". The site features a navigation bar with links like "Home", "API News", "API Directory", "Mashups", "Community", and "How-to". A search bar is located at the top right. The main content area includes a "Subscribe" section, an "API Directory" with a total of 8840 APIs, and a "Featured API" section for DocuSign. A "Popular Directory Searches" section lists various mashup categories. A "Top APIs for Mashups" section features a pie chart showing the distribution of APIs used in mashups.

Hot APIs » Twitter YouTube Facebook Google Maps Flickr LinkedIn More »

Latest news API Spotlight: Geopulse Context, Talkray, and Ephesoft AP... »

Subscribe
All New APIs

API Directory
Total APIs: 8840
Past 7 Days: 14
Past 30 Days: 51

Featured API
DocuSign
Read more on PW

Popular Directory Searches
Celebrity Mashups
Video Mashups
Popular New Mashups
All Popular Mashups
Maps Mashups
Photo Mashups
Shopping Mashups
Sports Mashups
Government Mashups
Dating Mashups
Games Mashups

API Dashboard
API news, how-to, contests and comprehensive database of API resources

Latest API
[Factual Geopulse Context](#)
★★★★★

New APIs
Factual Geopulse Context
Soleo
Little Bird
Contactually
City of Tempe Local Weather
See more new APIs

Browse our API DB
View all APIs
By Category
By Mashups
Add an API
How-To Guide

Top APIs for Mashups
Last 14 days See all time

Click on a slice or label to see details

API	Percentage
GoogleMaps	16%
Twitter	11%
Flickr	11%
Zazzle	11%
Amazon	11%
WordPressorg	11%
YouTube	11%
EBay	5%
Blekkio	5%
FacebookGraph	5%

Follow the PW team on Twitter

ProgrammableWeb
APIs, mashups and code.
Because the world's your programmable oyster.

John Musser
Founder, ProgrammableWeb

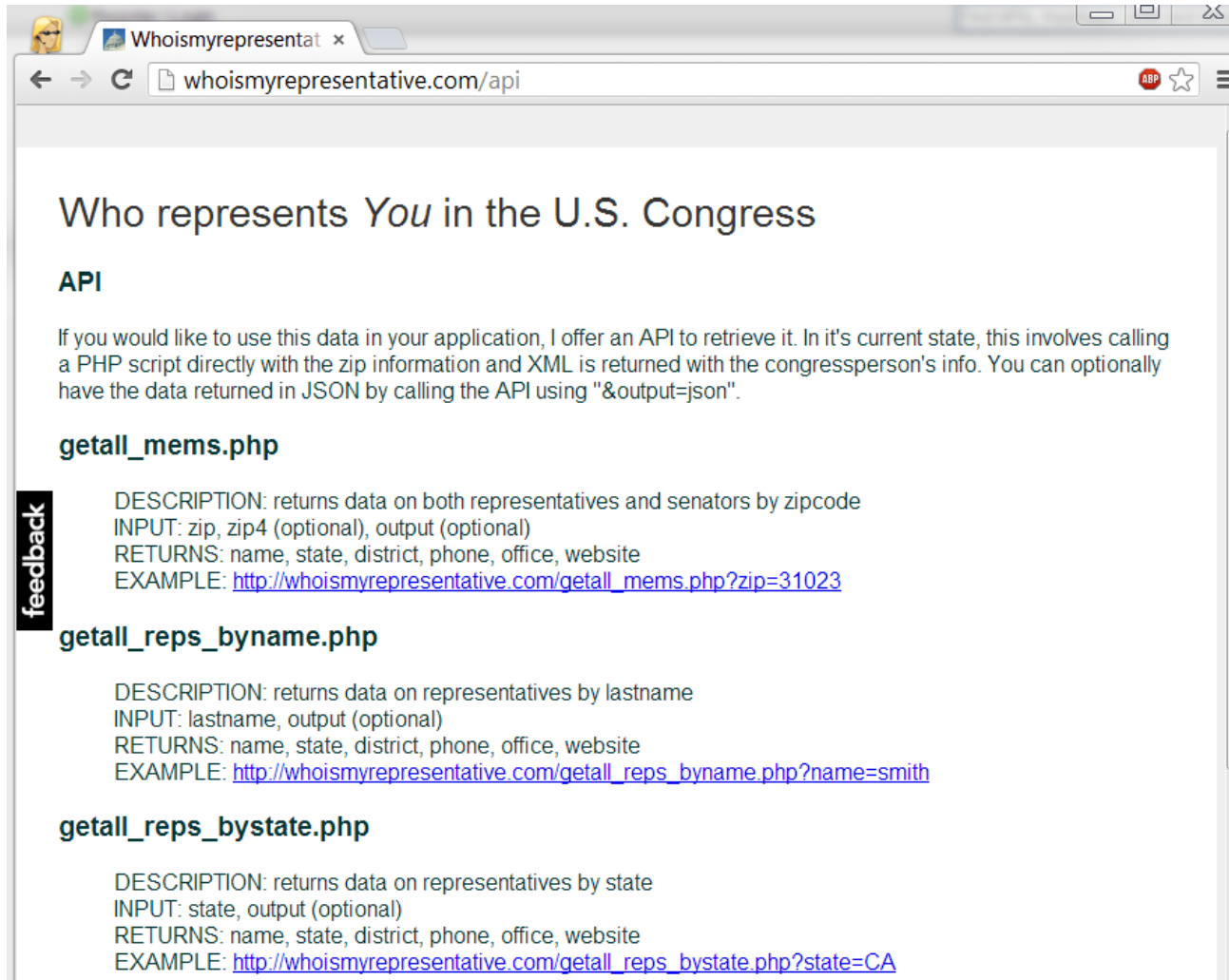
Adam DuVander
Executive Editor, ProgrammableWeb.
Author, Map Scripting 101.
Lover, APIs.

Popular Recent
Stories APIs Mashups

Httparty usage

- `include HTTParty` module
 - And you are good to go!
- Can specify
 - `base_uri` for your requests
 - `default_params` if same across multiple requests (API developer key for example)
 - `format` if you know which format the data is in
- DRY principle - don't repeat yourself!

Who is my representative?



The screenshot shows a web browser window with the address bar displaying "whoismyrepresentative.com/api". The page content includes a title "Who represents *You* in the U.S. Congress", an "API" section with a description of the service, and three API endpoints: "getall_mems.php", "getall_reps_byname.php", and "getall_reps_bystate.php". Each endpoint has a description, input/output details, and an example URL. A vertical "feedback" button is visible on the left side of the page.

Who represents *You* in the U.S. Congress

API

If you would like to use this data in your application, I offer an API to retrieve it. In it's current state, this involves calling a PHP script directly with the zip information and XML is returned with the congressperson's info. You can optionally have the data returned in JSON by calling the API using "&output=json".

getall_mems.php

DESCRIPTION: returns data on both representatives and senators by zipcode
INPUT: zip, zip4 (optional), output (optional)
RETURNS: name, state, district, phone, office, website
EXAMPLE: http://whoismyrepresentative.com/getall_mems.php?zip=31023

getall_reps_byname.php

DESCRIPTION: returns data on representatives by lastname
INPUT: lastname, output (optional)
RETURNS: name, state, district, phone, office, website
EXAMPLE: http://whoismyrepresentative.com/getall_reps_byname.php?name=smith

getall_reps_bystate.php

DESCRIPTION: returns data on representatives by state
INPUT: state, output (optional)
RETURNS: name, state, district, phone, office, website
EXAMPLE: http://whoismyrepresentative.com/getall_reps_bystate.php?state=CA

HTTParty example

```
require 'httparty'
```

```
class Representative  
  include HTTParty
```

```
  base_uri 'whoismyrepresentative.com'
```

```
  default_params output: "json"
```

```
  format :json
```

```
  def self.get_senators_by_state(state)
```

```
    get("/getall_sens_bystate.php", query: {state: state})
```

```
  end
```

```
  def self.get_representatives_by_state(state)
```

```
    get("/getall_reps_bystate.php", query: {state: state})
```

```
  end
```

```
end
```

```
p Representative.get_senators_by_state('MD')
```

```
# => #<HTTParty::Response:0x155e908 @parsed_response={"results"=>[{"name"=>"Benjamin  
Cardin", "party"...
```

```
p Representative.get_representatives_by_state('MD')["results"]
```

```
# => [{"name"=>"Elijah Cummings", "party"=>"D", "state"=>"MD", "district"=>"7" ...
```

Get request

state request
parameter