

Package ‘gbfs’

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Type Package

Title Interface with General Bikeshare Feed Specification Files

Version 1.1.0

Description Supplies a set of functions to interface with General Bikeshare Feed Specification .json feeds in R, allowing users to save and accumulate tidy .rds datasets for specified cities/bikeshare programs.

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Imports dplyr, readr, stringr, jsonlite, lubridate

Encoding UTF-8

LazyData true

RoxygenNote 6.1.0

Suggests knitr, rmarkdown

URL <https://github.com/ds-civic-data/gbfs>

BugReports <https://github.com/ds-civic-data/gbfs/issues>

NeedsCompilation no

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gbfs *Package: gbfs*

Description

General Bikeshare Feed Specification

Details

The ‘gbfs’ package supplies a set of functions to interface with General Bikeshare Feed Specification .json feeds in R, allowing users to save and accumulate tidy .rds datasets for specified cities/bikeshare programs.

gbfs Functions

get_gbfs(), get_free_bike_status(), get_station_information(), get_station_status(), get_system_alerts(),
get_system_calendar(), get_system_hours(), get_system_information(), get_system_pricing_plans(),
get_system_regions()

get_free_bike_status *Save the free_bike_status feed.*

Description

If the specified file does not exist, get_free_bike_status saves the free_bike_status feed for a given city as a .rds object. If the specified file does exist, get_free_bike_status appends the current free_bike_status feed to the existing file. Go to ‘<https://github.com/NABSA/gbfs/blob/master/gbfs.md>’ to see metadata for this dataset.

Usage

```
get_free_bike_status(city, directory, file = "free_bike_status.rds")
```

Arguments

city	A character string or a url to an active gbfs.json feed. See <code>get_gbfs_cities</code> for a current list of available cities.
directory	The name of an existing folder or folder to be created, where the feed will be saved.
file	The name of an existing file or new file to be saved. Must end in <code>.rds</code> .

Value

A `.rds` object generated from the current `free_bike_status` feed.

Examples

```
get_free_bike_status(city = "Melbourne", directory = tempdir())
```

<code>get_gbfs</code>	<i>Save gbfs feeds.</i>
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Description

`get_gbfs` checks for the existence of gbfs feeds for a given city and saves the feeds as `.rds` objects in a directory that can be specified by the user. Go to <https://github.com/NABSA/gbfs/blob/master/gbfs.md> to see metadata for each dataset.

Usage

```
get_gbfs(city, feeds = "all", directory)
```

Arguments

city	A character string or a url to an active gbfs.json feed. See <code>get_gbfs_cities</code> for a current list of available cities.
feeds	A character string specifying which feeds should be saved. Options are "all", "static", and "dynamic".
directory	The name of an existing folder or folder to be created, where the feeds will be saved.

Value

A folder containing the specified feeds saved as `.rds` objects.

Examples

```
get_gbfs(city = "boise", directory = tempdir())
```

get_gbfs_cities	<i>Get table of all cities releasing GBFS feeds</i>
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Description

Get table of all cities releasing GBFS feeds

Usage

```
get_gbfs_cities()
```

Value

A data.frame of all cities issuing GBFS feeds

Source

North American Bikeshare Association, General Bikeshare Feed Specification <https://raw.githubusercontent.com/NABSA/gbfs/master/systems.csv>

get_station_information	<i>Save the station_information feed.</i>
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Description

get_station_information saves the station_information feed for a given city as a .rds object. Go to <https://github.com/NABSA/gbfs/blob/master/gbfs.md> to see metadata for this dataset.

Usage

```
get_station_information(city, directory,
  file = "station_information.rds")
```

Arguments

city	A character string or a url to an active gbfs.json feed. See get_gbfs_cities for a current list of available cities.
directory	The name of an existing folder or folder to be created, where the feed will be saved.
file	The name of the file to be saved. Must end in .rds.

Value

A .rds object generated from the current station_information feed.

Examples

```
get_station_information(city =  
  "http://biketownpdx.socialbicycles.com/opendata/station_information.json", directory = tempdir())  
get_station_information(city = "Battle Creek", directory = tempdir())
```

get_station_status *Save the station_status feed.*

Description

If the specified file does not exist, `get_station_status` saves the `station_status` feed for a given city as a `.rds` object. If the specified file does exist, `get_station_status` appends the current `station_status` feed to the existing file. Go to <https://github.com/NABSA/gbfs/blob/master/gbfs.md> to see metadata for this dataset.

Usage

```
get_station_status(city, directory, file = "station_status.rds")
```

Arguments

<code>city</code>	A character string or a url to an active <code>gbfs.json</code> feed. See <code>get_gbfs_cities</code> for a current list of available cities.
<code>directory</code>	The name of an existing folder or folder to be created, where the feed will be saved.
<code>file</code>	The name of an existing file or new file to be saved. Must end in <code>.rds</code> .

Value

A `.rds` object generated from the current `station_status` feed.

Examples

```
get_station_status(city =  
  "http://biketownpdx.socialbicycles.com/opendata/station_status.json", directory = tempdir())
```

get_system_alerts *Save the system_alerts feed.*

Description

get_system_alerts saves the system_alerts feed for a given city as a .rds object. Go to [‘https://github.com/NABSA/gbfs/blob/master/gbfs.md’](https://github.com/NABSA/gbfs/blob/master/gbfs.md) to see metadata for this dataset.

Usage

```
get_system_alerts(city, directory, file = "system_alerts.rds")
```

Arguments

city	A character string or a url to an active gbfs.json feed. See get_gbfs_cities for a current list of available cities.
directory	The name of an existing folder or folder to be created, where the feed will be saved.
file	The name of the file to be saved. Must end in .rds.

Value

A .rds object generated from the current system_alerts feed.

Examples

```
get_system_alerts(city =  
"http://biketownpdx.socialbicycles.com/opendata/system_alerts.json", directory = tempdir())  
get_system_alerts(city = "Santa Monica", directory = tempdir())
```

get_system_calendar *Save the system_calendar feed.*

Description

get_system_calendar saves the system_calendar feed for a given city as a .rds object. Go to [‘https://github.com/NABSA/gbfs/blob/master/gbfs.md’](https://github.com/NABSA/gbfs/blob/master/gbfs.md) to see metadata for this dataset.

Usage

```
get_system_calendar(city, directory, file = "system_calendar.rds")
```

Arguments

city	A character string or a url to an active gbfs.json feed. See <code>get_gbfs_cities</code> for a current list of available cities.
directory	The name of an existing folder or folder to be created, where the feed will be saved.
file	The name of the file to be saved. Must end in <code>.rds</code> .

Value

A `.rds` object generated from the current `system_calendar` feed.

Examples

```
get_system_calendar(city =
"http://biketownpdx.socialbicycles.com/opendata/system_calendar.json", directory = tempdir())
get_system_calendar(city = "Tampa", directory = tempdir())
```

<code>get_system_hours</code>	<i>Save the system_hours feed.</i>
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Description

`get_system_hours` saves the `system_hours` feed for a given city as a `.rds` object. Go to <https://github.com/NABSA/gbfs/blob/master/README.md> to see metadata for this dataset.

Usage

```
get_system_hours(city, directory, file = "system_hours.rds")
```

Arguments

city	A character string or a url to an active gbfs.json feed. See <code>get_gbfs_cities</code> for a current list of available cities.
directory	The name of an existing folder or folder to be created, where the feed will be saved.
file	The name of the file to be saved. Must end in <code>.rds</code> .

Value

A `.rds` object generated from the current `system_hours` feed.

Examples

```
get_system_hours(city =
"http://biketownpdx.socialbicycles.com/opendata/system_hours.json", directory = tempdir())
get_system_hours(city = "Phoenix", directory = tempdir())
```

get_system_information

Save the system_information feed.

Description

get_system_information saves the system_information feed for a given city as a .rds object. Go to <https://github.com/NABSA/gbfs/blob/master/gbfs.md> to see metadata for this dataset.

Usage

```
get_system_information(city, directory, file = "system_information.rds")
```

Arguments

city	A character string or a url to an active gbfs.json feed. See get_gbfs_cities for a current list of available cities.
directory	The name of an existing folder or folder to be created, where the feed will be saved.
file	The name of the file to be saved. Must end in .rds.

Value

A .rds object generated from the current system_information feed.

Examples

```
get_system_information(city =  
"http://biketownpdx.socialbicycles.com/opendata/system_information.json", directory = tempdir())  
get_system_information(city = "Omaha", directory = tempdir())
```

get_system_pricing_plans

Save the system_pricing_plans feed.

Description

get_system_pricing_plans saves the system_pricing_plans feed for a given city as a .rds object. Go to <https://github.com/NABSA/gbfs/blob/master/gbfs.md> to see metadata for this dataset.

Usage

```
get_system_pricing_plans(city, directory,  
file = "system_pricing_plans.rds")
```


Arguments

city	A character string or a url to an active gbfs.json feed. See <code>get_gbfs_cities</code> for a current list of available cities.
directory	The name of an existing folder or folder to be created, where the feed will be saved.
file	The name of the file to be saved. Must end in <code>.rds</code> .

Value

A `.rds` object generated from the current `system_pricing_plans` feed.

Examples

```
get_system_pricing_plans(city =
  "http://biketownpdx.socialbicycles.com/opendata/system_pricing_plans.json", directory = tempdir())
get_system_pricing_plans(city = "Houston", directory = tempdir())
```

```
get_system_regions      Save the system_regions feed.
```

Description

`get_system_regions` saves the `system_regions` feed for a given city as a `.rds` object. Go to `'https://github.com/NABSA/gbfs/blob/master/gbfs.md'` to see metadata for this dataset.

Usage

```
get_system_regions(city, directory, file = "system_regions.rds")
```

Arguments

city	A character string or a url to an active gbfs.json feed. See <code>get_gbfs_cities</code> for a current list of available cities.
directory	The name of an existing folder or folder to be created, where the feed will be saved.
file	The name of the file to be saved. Must end in <code>.rds</code> .

Value

A `.rds` object generated from the current `system_regions` feed.

Examples

```
get_system_regions(city =
  "http://biketownpdx.socialbicycles.com/opendata/system_regions.json", directory = tempdir())
get_system_regions(city = "Boston", directory = tempdir())
```

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