Rails Apps Import Integration

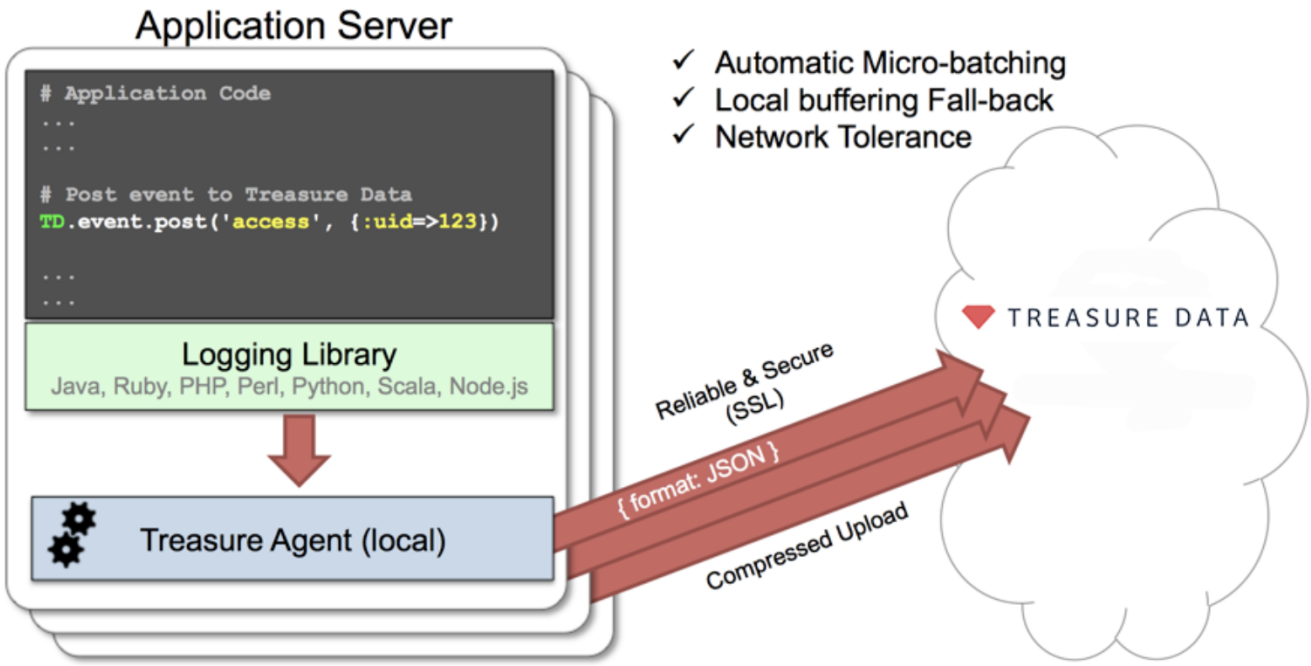
Treasure Data provides td-agent to collect server-side logs and events and to seamlessly import the data from Ruby on Rails applications.

Prerequisites

- Basic knowledge of Ruby, Rails, Gems, and Bundler.
- Basic knowledge of Treasure Data.
- Ruby 2.0 or higher (for local testing).

Installing td-agent

Install `td-agent`on your application servers. td-agent sits within your application servers, focusing on uploading application logs to the cloud.



The td-logger-ruby library enables Ruby on Rails applications to post records to their local td-agent. td-agent, in turn, receives the records, buffers them, and uploads the data to the cloud every 5 minutes. Because the daemon runs on a local node, the logging latency is negligible.

td-agent Install Options

To install `td-agent`, run one of the following commands based on your environment. The agent program is installed automatically by using the package management software for each platform like rpm/deb/dmg.

RHEL/CentOS 5,6,7

```
$ curl -L https://toolbelt.treasuredata.com/sh/install-redhat-td-agent3.sh | sh
```

Ubuntu and Debian

```
# 16.04 Xenial (64bit only)
$ curl -L https://toolbelt.treasuredata.com/sh/install-ubuntu-xenial-td-agent3.sh | sh
# 14.04 Trusty
$ curl -L https://toolbelt.treasuredata.com/sh/install-ubuntu-trusty-td-agent3.sh | sh
# 12.04 Precise
$ curl -L https://toolbelt.treasuredata.com/sh/install-ubuntu-precise-td-agent3.sh | sh
# Debian Stretch (64-bit only) $ curl -L https://toolbelt.treasuredata.com/sh/install-debian-stretch-td-agent3.
sh | sh
# Debian Jessie (64-bit only)
$ curl -L https://toolbelt.treasuredata.com/sh/install-debian-jessie-td-agent3.sh | sh
# Debian Squeeze (64-bit only)
$ curl -L https://toolbelt.treasuredata.com/sh/install-debian-squeeze-td-agent2.sh | sh
```

Amazon Linux

You can choose Amazon Linux 1 or Amazon Linux 2. Refer to Installing td-agent on Amazon Linux.

MacOS X 10.11+

```
$ open 'https://td-agent-package-browser.herokuapp.com/3/macosx/td-agent-3.1.1-0.dmg'
```

MacOS X 10.11.1 (El Capitan) introduces some security changes. After the td-agent is installed, edit the **/Library/LaunchDaemons/td-agent.plist** file to change **/usr/sbin/td-agent** to **/opt/td-agent/usr/sbin/td-agent**.

Windows Server 2012+

The Windows installation requires the steps detailed in:

- Installing Treasure Agent using .msi Installer (Windows)

Opscode Chef Repository

You can read more about the repository.

```
$ echo 'cookbook "td-agent"' >> Berksfile
$ berks install
```

AWS Elastic Beanstalk is also supported. Windows is NOT supported.

Modifying /etc/td-agent/td-agent.conf

Specify your API key by setting the `apikey` option in your `/etc/td-agent/td-agent.conf` file.

```
# Input from Logging Libraries
<source>
  type forward
  port 24224
</source>

# Treasure Data Output
<match td.*.*>
  type tdlog
  endpoint api.treasuredata.com
  apikey YOUR_API_KEY
  auto_create_table
  buffer_type file
  buffer_path /var/log/td-agent/buffer/td
  use_ssl true
</match>
```

YOUR_API_KEY should be your actual apikey string. You can retrieve your api key from your profile in TD Console. Using the [write-only API keys](access-control#rest-apis-access) is recommended.

Restart your agent after adding the following lines:

```
# Linux
$ sudo /etc/init.d/td-agent restart

# MacOS X
$ sudo launchctl unload /Library/LaunchDaemons/td-agent.plist
$ sudo launchctl load /Library/LaunchDaemons/td-agent.plist
```

td-agent accepts data via port 24224, buffers the data (*var/log/td-agent/buffer/td*), and automatically uploads the data into the cloud.

Using td-logger-ruby

Add the 'td' gem to your Gemfile.

```
gem 'td', "~> 0.10.6"
```

Modify the *config/treasure_data.yml* file as follows:

```
production:
  agent: "localhost:24224"
  tag: td.production_database_name
  debug_mode: false

development:
  agent: "localhost:24224"
  tag: td.development_database_name
  debug_mode: false

test:
```

Insert the appropriate logging code into your application.

```
# Example1: login event
TD.event.post('login', {:uid=>123})

# Example2: follow event
TD.event.post('follow', {:uid=>123, :from=>'TD', :to=>'Heroku'})

# Example3: pay event
TD.event.post('pay',
              {:uid=>123, :item_name=>'Stone of Jordan',
               :category=>'ring', :price=>100, :count=>1})
```

Confirming Data Import

Execute the program.

```
$ ruby test.rb
```

Sending a SIGUSR1 signal flushes td-agent's buffer. The upload starts immediately.

```
# Linux
$ kill -USR1 `cat /var/run/td-agent/td-agent.pid`

# MacOS X
$ sudo kill -USR1 `sudo launchctl list | grep td-agent | cut -f 1`
```

From TD Console

To confirm that your data has been uploaded successfully, check your data set.

From CLI

Or, use the *td tables* command if you have a CLI.

```
$ td tables
+------------+------------+------+-----------+
| Database   | Table      | Type | Count     |
+------------+------------+------+-----------+
| test_db    | login      | log  | 1         |
| test_db    | follow     | log  | 1         |
| test_db    | pay        | log  | 1         |
+------------+------------+------+-----------+
```

Production Deployments

Use Rack-Based Server Deployments

We recommend that you use *unicorn*, *thin*, *mongrel*, etc. Other setups have not been fully validated.

High Availability Configurations of td-agent

For high-traffic websites (more than 5 application nodes), use a high availability configuration of td-agent to improve data transfer reliability and query performance.

- High-Availability Configurations of td-agent

Monitoring td-agent

Monitoring td-agent itself is also important. For general monitoring methods for td-agent, see Monitoring td-agent.

td-agent is fully open-sourced under the Fluentd project.