






# In this lecture, we will discuss...








- ✧ Bundler
- ✧ Managing gems inside your Rails application


# Bundler

 bundler.io




 Search





The best way to manage your application's dependencies

**Bundler**



## What is Bundler?

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Bundler provides a consistent environment for Ruby projects by tracking and installing the exact gems and versions that are needed.

## Would you like to

- Get started
- Report a bug
- See what's new
- Read documentation



# Bundler

- ✧ Lets you **specify gems** (and associated gem dependencies) for this Rails app inside **Gemfile** (in the root of your Rails app)
- ✧ **Preferred way** to **manage gem dependencies** in Rails
- ✧ Run **bundle install** or simply **bundle** after specifying a new gem in the Gemfile
- ✧ Run **bundle update** when **modifying** a version of a gem



# Bundler

- ✧ You can **instruct Rails** (through **Gemfile**) to **only load certain gems** in specific Rails environments

```
group :development, :test do
  # Call 'byebug' anywhere in the code to stop execution and get a debugger console
  gem 'byebug'

  # Access an IRB console on exception pages or by using <%= console %> in views
  gem 'web-console', '~> 2.0'

  # Spring speeds up development by keeping your application running in the background.
  gem 'spring'
end
```



# Bundler – Which Version Of Gem?

- ✧ If you **don't specify** ... You get the latest version
- ✧ Can specify an **exact version** or an **approximate version**

```
gem "nokogiri"  
gem "rails", "3.0.0.beta3"  
gem "rack", ">=1.0"  
gem "thin", ">= 1.1", "< 2.0"  
gem "thin", "~>1.1"
```

~> Pessimistic Version Constraint

Drop the final digit, then  
increment to get the upper limit  
version number



# Bundler: require

- ✧ Occasionally, the name of the gem to be used inside `require` statement is **different** than the name of the gem

```
gem 'sqlite3-ruby', require: 'sqlite3'
```

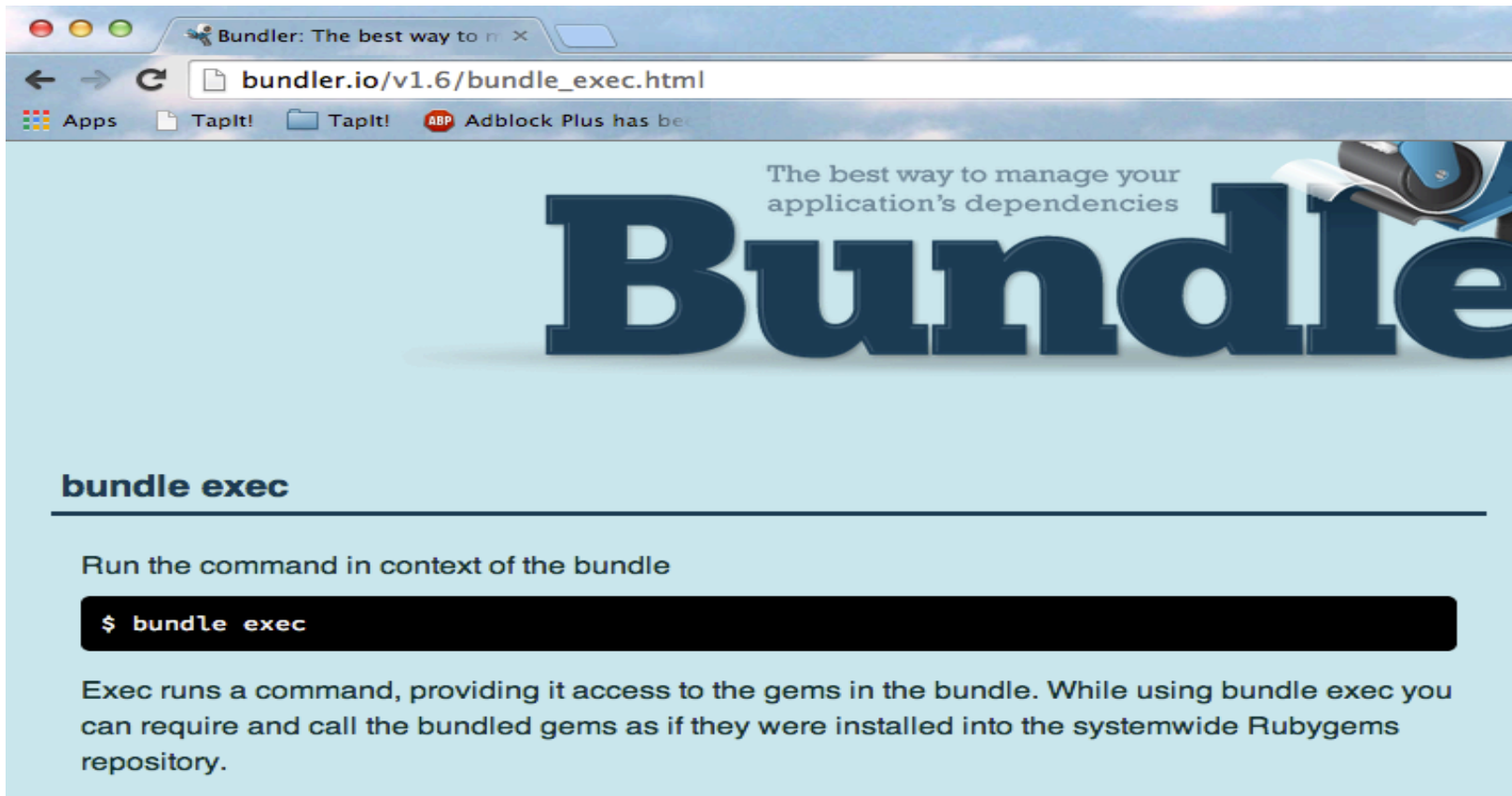


# Gemfile - Example

```
source 'http://rubygems.org'
gem 'rails', '4.2.3'
# Bundle edge Rails instead:
# gem 'rails', github:'git://github.com/rails/rails.git'
gem 'sqlite3'
...
```

- ✧ Our app can even use a **different version** of Rails if you **change the version** and run **bundle update**
- ✧ Bundler creates a **Gemfile.lock** file, which **contains the actual gem versions** your app is using with their **associated dependencies**

# Bundle exec?



The screenshot shows a web browser window with the address bar displaying `bundler.io/v1.6/bundle_exec.html`. The page title is "Bundler: The best way to manage your application's dependencies". The main heading is "Bundler". Below this, the section "bundle exec" is highlighted with a horizontal line. The text "Run the command in context of the bundle" is followed by a code block containing the command `$ bundle exec`. Below the code block, the text explains that `Exec` runs a command, providing it access to the gems in the bundle, and that it can require and call the bundled gems as if they were installed into the systemwide Rubygems repository.

Bundler: The best way to manage your application's dependencies

## Bundler

### bundle exec

Run the command in context of the bundle

```
$ bundle exec
```

Exec runs a command, providing it access to the gems in the bundle. While using bundle exec you can require and call the bundled gems as if they were installed into the systemwide Rubygems repository.



# Summary

- ✧ Bundler **manages** gem dependencies
- ✧ **Loads** gems on application startup

## What's Next

- ✧ Integrating HTTParty and Rails

