

Ruby On Rails RJS Templates

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RJS Templates

— [Not available in Rails 1.0.x

— [Available In EdgeRails

— [Available As A Plugin

EdgeRails

— [EdgeRails = Rails Subversion Trunk

— [Bleeding Edge Source

— [Code Is Tested (You Hope) But Not Considered Stable

— [GemRails = Standard Rails Gems (release version)

GemRails To EdgeRails (Project Not In Subversion)

— [Easy way = rake freeze_edge - copies the entire rails framework into your application (vendor/rails)

— [Manual way

— cd vendor; rm -rf vendor/rails

— svn co <http://dev.rubyonrails.org/svn/rails/trunk> rails

GemRails To EdgeRails (Project In Subversion)

— [Subversion Externals - Link directories in your repository to other Subversion repositories.

— [Set the externals property

— `svn propedit svn:externals vendor` - launches text editor

— type 'rails <http://dev.rubyonrails.org/svn/rails/trunk/>' and save

— commit the new property - `svn ci -m 'setting the new externals property'`

— [`svn update` will now checkout the rails trunk into `/vendor/rails`

GemRails To EdgeRails

Upgrade Rails Project

— [From rails project root - 'rails .'

— [rake update_javascripts

EdgeRails To GemRails

— [rake unfreeze_rails

— [svn propdel svn:externals vendor (from rails app root dir)

— [from rails project root - 'rails .'

— [rake update_javascript

RJS Templates

— [R HTML

— [R XML

— [**R JavaScript** - Requests generate Javascript to update a page in place

RJS Templates Plugin

— [Makes RJS Templates Available To Apps Running On GemRails or Stable Branch (<http://dev.rubyonrails.org/svn/rails/branches/stable>)

— [Created By Cody Fauser

— [Installation instructions are available at: <http://www.codyfauser.com/pages/rjs-plugin>

RJS Templates Plugin Install

— [script/plugin discover (make sure you add <http://www.codyfauser.com/svn/projects/plugins>)

— [script/plugin sources - to confirm

— [script/plugin install javascript_generator_templates

— [OR do script/plugin install http://www.codyfauser.com/svn/projects/plugins/javascript_generator_templates

Rails Request Lifecycle

- [Map the URL to a route
- [Resolve the controller
- [Resolve the action
- [Render the template

Rails Request Lifecycle

- [`lighttpd -> public/dispatch.fcgi`
- [`.../railties/lib/fcgi_handler.rb`
 - `RailsFCGIHandler#process!`
- [`.../railties/lib/dispatcher.rb`
 - `load application.rb`

Rails Request Lifecycle

- [`.../actionpack/lib/actioncontroller/routing.rb`

- `ActionController::Routing::Routes#recognize!(cgi_request)`
returns an instance of your controller

- `ActionController::Base#process`

- [`.../actionpack/lib/actioncontroller/base.rb`

- create instance of `@view_class` within the controller

- call the action method

Rails Request Lifecycle

- [`.../actionpack/lib/actionview/base.rb`

- `ActionView::Base#render_file` - finds view template extension

- `ActionView::Base#render_template`

Rendering An RJS Template

- [`ActionView::Base#create_template_source`

- [Content-Type header set to `'text/javascript'`

- [Compile the template if necessary

- — Wrap template source in `'update_page do | page | ... end'`

- — Wrap that in `'def _run_rjs_'`

- [Execute `_run_rjs_`

Rendering An RJS Template

— [update_page returns a new `ActionView::Helpers::PrototypeHelper::JavascriptGenerator` which takes the RJS template as a block

JavascriptGenerator

— [<< - write raw Javascript to the page

— [insert_html - insert DOM element

— [replace_html - replace DOM element

— [hide / show DOM elements

— [remove - remove DOM element

— [visual_effect - scriptaculous visual effects

Benefits Of RJS Templates

— [You can update multiple DOM elements at the same time

— [You can 'inject' Javascript to match the current state of the UI.

— [???

Inline RJS

No need for a view template.

```
class UserController < ApplicationController
  def refresh
    render :update do |page|
      page.replace_html('user_list',
        :partial => 'user', :collection => @users)
      page.visual_effect :highlight, 'user_list'
    end
  end
end
```

DEMO