Software Engineering Project - Links Plugin Architecture and Plugin Creation Guide

Abhijith Madhav, Arjun S Bharadwaj

September 3, 2014

Plugin architecture diagram

Below is the plugin architecture diagram of "Links".

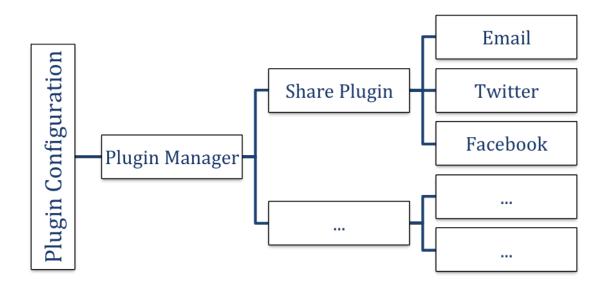


Figure 1: Links - Plugin Architecture Diagram.

These are the components of the Plugin Architecture.

- 1. Configuration File: This file will consist of all the plugins that are enabled in the system.
- 2. Plugin Manager: The Plugin Manager will lookup the configuration file and will enable/disale the plugins.
- 3. Share Plugin: This plugin will help to share the links on various platforms like Email, Twitter and Facebook.

Plugin creation guide in Rails

A plugin is a fully functional rails app. It can be made mountable so that it could be used only with the main app.

1. Create a new rails project in Rails.

Ex: rails new links

Plugin Architecture Diagrams

Here, a project called links is created.

2. Create a plugin project and make it mountable.

```
Ex: rails plugin new share --mountable
```

Here, a plugin called share is created.

3. Add the dependency gem in the main project in "Gemfile".

```
gem 'share', path: "../share"
```

Here, a gem called "/share" is added as dependency in the main project and "bundle install" is executed in the main project. The path is relative here. If the Engine is published as Gem, the gem location can be given too.

4. Add a mount point in the main project in "routes.rb" file.

```
mount Share::Engine, :at => "/share"
```

Here, a mount point at "/share" is created. So all the controllers of share plugin can be access via "/share" path.