The Definitive Guide to symfony

François Zaninotto and Fabien Potencier

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To Anne-Marie. —François Zaninotto

For Thomas and Hélène, with love. —Fabien Potencier

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About the Authors

FRANÇOIS ZANINOTTO is a consultant and project manager for Internet application projects. He graduated from the French business school Ecole des Mines in 1997 with a specialization in computer science. He tried quite a few jobs before settling on the Internet business: social worker in a children's facility, manager of a bike rental shop, web project manager for a tire manufacturer, writer of a travel guide on Germany for the same tire manufacturer, logistician for Médecins Sans Frontières, and IT architect for a consumer credit company. He joined the Sensio web agency in 2003, and since then has managed many Internet and intranet web application projects, dealing with complex usability issues, agile development methodologies, and cutting-edge web techniques. When the symfony project started, he took responsibility for the documentation, and wrote the symfony online book and tutorials.

FABIEN POTENCIER is a serial entrepreneur. Since he was ten, he always dreamed of creating and running companies. He started his career with an engineering degree from the French business school Ecole des Mines and an MBA in entrepreneurship from HEC Paris. In 1998, right after graduation, Fabien founded his very first company with a fellow student. The company was a web agency focused on simplicity and open source technologies, and was called Sensio. His acute technical knowledge and his endless curiosity won him the confidence of many French big corporate companies. While Sensio kept growing (at the time of writing, it has more than 30 employees), Fabien started other businesses: an indoor go-kart circuit in Lille (France), an auto spare parts e-commerce shop, and an autopilot training business riding on the most famous French racetracks. Fabien is the main developer of the symfony framework and is responsible for 95% of its code. Today, Fabien spends most of his time as Sensio's CEO and as the symfony project leader.

About Sensio Labs

Sensio is a French web agency well known for its innovative ideas on web development. Founded in 1998 by Fabien Potencier, Gregory Pascal, and Samuel Potencier, Sensio benefited from the Internet growth of the late 1990s and situated itself as a major player for building complex web applications. It survived the Internet bubble burst by applying professional and industrial methods to a business where most players seemed to reinvent the wheel for each project. Most of Sensio's clients are large French corporations, who hire its teams to deal with small- to middle-scale projects with strong time-to-market and innovation constraints.

Today, Sensio's activity is divided in two business lines:

- Extreme Sensio deals with the interactive marketing projects and provides consulting on Internet communication strategies. It builds online communication campaigns from early conception to final product (websites, mailings, videos, viral marketing, and so on).
- Sensio Labs develops interactive web applications, both for dot-com and traditional
 companies. This division also provides auditing, consulting, and training on Internet
 technologies and complex application deployment. It helps define the global Internet
 strategy of large-scale industrial players. Sensio Labs has projects in France and abroad.

For its own needs, Sensio Labs develops the symfony framework and sponsors its deployment as an open source project. This means that symfony is built from experience and is really employed in many web applications, including those of large corporations.

Since its beginnings nine years ago, Sensio has always based its strategy on strong technical expertise. The company focuses on open source technologies, and as for dynamic scripting languages, Sensio offers developments in all LAMP platforms (Perl, Python, PHP, and Ruby, even if the latter doesn't start with a *P*). Sensio acquired strong experience on the best frameworks using these languages, and often develops web applications in Django, Rails, and, of course, symfony.

Sensio is always open to new business opportunities, so if you ever need help developing a web application, learning symfony, or evaluating a symfony development, feel free to contact us at info@sensio.com. The consultants, project managers, web designers, and developers of Sensio can handle projects from A to Z.

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The symfony community, who asked thousands of questions about the framework, is also to be thanked, for they made us understand that this book should contain many practical tips.

And lastly, the authors would like to thank the reader of this book, who contributes to the development of the symfony project by this purchase, and would like to welcome every reader into the community.

Introduction

When symfony first appeared in October 2005, many people heard about it mainly because of its extensive documentation. Unlike with other open source projects, you don't have to dig into the symfony code to understand how a method works or what a feature does. Documentation has always been a major concern among the symfony core team, and that's why we wrote this book: to leverage the adoption of the framework we initiated, to serve as a reference for the 1.0 release, and to allow enterprise use of a framework written primarily for professionals.

Who This Book Is For

For this book, you need a basic understanding of PHP 5 and object-oriented programming. Of course, having already developed web applications in PHP before reading this book is a plus, for you will see this book as a collection of answers to the questions you regularly ask yourself.

How This Book Is Structured

In this book, you will learn how to use symfony to build web applications. The chapters are grouped into five parts:

- The Basics covers all the general concepts and prerequisites for starting symfony.
- *The Core Architecture* describes how the three layers of the Model-View-Controller (MVC) architecture are implemented in symfony, and how to build pages and applications according to this separation.
- Special Features explains how to use symfony's mechanisms for shortening the development
 of smart URLs, forms and validation, Ajax interactions, caching, and internationalized
 applications.
- *Development Tools* covers the resources provided by symfony to make day-to-day development tasks easier: code generators, unit testing framework, command-line tasks, and plug-ins.
- Becoming a Symfony Expert reveals a few secret corners of the symfony code and shows
 you how to tweak the framework's behavior.

Conventions Used in This Book

In the code examples, the names starting with my are just examples of actual names. For instance, you will see myproject, myapp, and mymodule. In your own code, replace these with the

real names of your project, application, and module. Not surprisingly, the words Foo and Bar (and sometimes FooBar) will be used as sample content for strings. Also, in syntax explanations, three Xs represent a sample name. For instance, validateXXX() is the syntax of a method that can be named validateUpdate(), validateEdit(), and so on.

Code lines longer than the book page width are indicated with a \Rightarrow character. When you see this symbol at the end of a line, it means that you should read this line and the following as a single line. Here's an example:

```
<?php echo link_to('I never say my name', 'mymodule/myaction?name=anonymous', \(\infty\)
'class=foobar') ?>
```

Each command that should be typed in a *nix shell or a Windows command line starts with a greater-than sign:

```
> symfony clear-cache
```

In some code examples, the output of a script when viewed by a browser is written directly after the script code, preceded by an arrow, as follows:

```
<?php echo "Hello, World!" ?>
=> Hello, World!
```

On the other hand, the output of a command appears between two horizontal separators, as follows:

```
> php symfony -V
```

symfony version 1.0.0

Contacting the Authors

You can chat with François and Fabien on the #symfony IRC channel on freenode (irc://irc.freenode.net/symfony) or send them an e-mail at the following addresses:

```
francois.zaninotto@symfony-project.com
fabien.potencier@symfony-project.com
```

Be aware that they both live in France, so depending where you're writing from, there might be a delay in the response due to the difference in time zone.

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Symfony integrates and/or uses code from third-party projects: Mojavi3 (MVC framework), Propel (object-relational mapping), Creole (database abstraction), Phing (CLI utility), Unicode (i18n), Dynarch (JavaScript calendar), Prototype (JavaScript library), script.aculo.us (JavaScript library), famfamfam (icons), Prado (i18n classes), PHPMailer (mail functions), Spyc (YAML parser), pake (CLI utility), and lime (testing framework). Refer to the online copyright file at http://www.symfony-project.com/trac/browser/trunk/COPYRIGHT.