

# SENSIO LABS

## Symfony and REST Training

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## INTRODUCTION

The **symfony and REST** elearning training helps you to discover in **eight hours** how to build and consume powerful RESTful web services thanks to symfony's and Zend's integrated tools.

During eight hours, you will be trained by a Sensio Labs consultant, who's an expert in PHP 5 and symfony web development. He'll lead you in the discovery of building web services with symfony. You will discover how to setup RESTful web services, how to consume them and how to test them with or without caching strategies.

## THE SYMFONY FRAMEWORK

**Symfony** is a full stack **PHP 5 framework** based on web development experience for well known national and international big companies. Symfony is born after 18 months of R&D and was built by Sensio to answer to most professional web issues. It also allows to close the **Open Source World** and the enterprise World.

Symfony is a mature framework allowing professional web development. Its main advantages are listed below:

- Ensuring code and structure organization ;
- Industrializing web developments;
- Ensuring code quality, maintenance and long time support.

Sensio Labs has also released the whole official documentation of the symfony framework as online pages and printed copy books. The main printed book, " The Definitive Guide to symfony " is referenced in APress editing. This free documentation has also been updated for the 1.1, 1.2, 1.3 and 1.4 with the new "Practical symfony" book.

## TRAINING'S GOALS

The main goal of this training is to help attendees to learn the basic knowledge about RESTful APIs integration with the symfony framework in order to be able to develop RESTful web services with the framework. To do that, this training follows a pedagogic scheme based on practice, about 70% of the time, to help attendees to discover all symfony's advanced tools.

## AUDIENCE AND PREREQUISITES

This training is dedicated to advanced symfony developers having a good global knowledge of the PHP framework and object oriented programming. These prerequisites are fundamental to be able to take benefit from this eight hours training.

## DURATION AND PRICE

The training will take place during **huit heures**, split in four sessions of two hours.

The price for one participant is **600 euros (taxes not included)** and **540 euros (taxes not included)** for more than 5 attendees.

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## THE TRAINING COURSE

The training will be managed by a symfony expert. It's given online on a dedicated e-learning platform, on which attendees and trainer get connected from their web browser. This e-learning application allows the trainer to give his talk in the best conditions, including a white board on which training materials are displayed, sound, pictures, text messaging and video. Attendees can take part to the training with a "chat" and their microphones.

Training materials are displayed along the training on the application in order to allow attendees to follow the course and guide them between theory and practice. These training materials contain theoretic concepts to master and exercises with their solutions.

**Attendees will receive a convocation by email indicating the time and links to handle their connection on the e-learning platform. This convocation also indicates they have to setup their personal laptop with the following software:**

- Java runtime activated
- Voice and sound activated (speakers or headphones)
- PHP 5.2.4 (or greater) with PDO
- An IDE (Eclipse, Netbeans...) or a simple text editor (Notepad++)
- MySQL 5

Lots of exercises are given along the training session. Attendees will be asked to develop by themselves two different applications. The first one will be a server application, which exposes RESTful web services with symfony, whereas the second will be a client application to consume the previous services.

## THE TRAINER

The trainer is a symfony expert. Our trainers are all consultants and know symfony very well as they worked with it on big companies' projects.

## EVALUATION

Evaluation is managed by the trainer, who's on charge to lead each participant during the whole training. Moreover, he invites attendees to get involved in the session by chatting with all people in the virtual room.

Exercises are made with the whole group and each attendee takes part to the session's animation. All attendees have their own working copy on their personal computer.

## TRAINING CONDITIONS

The training takes place during eight hours, split in four modules of two hours, on an elearning platform. This application is accessible from a web browser just after having clicked on link sent by email.

The virtual room offers attendees and trainers lots of tools to interact with each other. The trainer owns a virtual white board on which he can display training materials, a webcam and a microphone to speak during the training session.

Attendees own an instant text messaging system to allow them to chat with each other and the trainer. They also can chat by voice with the trainer if they own a microphone.

## FULL PROGRAM

### WEB SERVICES WITH SYMFONY

- ✓ Understanding the REST architecture
- ✓ Understanding the URI and HTTP protocol concepts
- ✓ Building RESTful web services with symfony
- ✓ Generating several output open formats as HTML, XML or JSON
- ✓ Discovering the special sf\_format request parameter
- ✓ Using the symfony's RESTful API
- ✓ Creating routes depending on the model and HTTP methods
- ✓ Using the Zend\_Http component from the Zend Framework
- ✓ Handling errors
- ✓ Caching service's responses locally thanks to sfFileCache
- ✓ **Lab: Developing a REST server application.**
- ✓ **Lab: Developing a REST client application.**

### TESTS UNITAIRES ET FONCTIONNELS DES SERVICES WEB

- ✓ Writing unit tests to check the model and service classes
- ✓ Writing functional tests to check web services
- ✓ Simulating web services on the client application (mocking)
- ✓ Validating output formats and HTTP status codes
- ✓ Validating a proprietary XML file with an XSD schema
- ✓ Simulating GET, POST, PUT and DELETE HTTP methods
- ✓ **Lab: Writing unit and functional tests for web services**