



# NetBeans

December . 2007

## magazine

### The Best Ruby IDE

Dynamic web development and the IDE's Ruby features

### Fluent in NetBeans

How global localization efforts are expanding the IDE's reach

### Advanced Profiling

Real-world explorations with the NetBeans Profiler

### Schliemann in the Field

People and projects working to multiply language support

Expand your development

# Horizons

with NetBeans 6.0

### Creative uses of the Visual Library

Explore the graph handling and visualization Platform API

### Creating RESTful Web Services

A comprehensive tutorial on extensions for REST development

### Module Development with Maven

A powerful alternative for building NetBeans extensions



# New Horizons

## Publisher & Editor-in-Chief

Leonardo Galvao  
[leonardo.galvao@gmail.com](mailto:leonardo.galvao@gmail.com)

## Assistant Editor

Osvaldo Doederlein  
[opinali@gmail.com](mailto:opinali@gmail.com)

## Design and Layout

pH Design



Graphic Designers

Tarcisio Bannwart  
Jaime Peters Jr.  
Tersis Zonato

Illustrator

Felipe Machado

## Contributors

Emilian Bold  
Fabrizio Giudici  
Geertjan Wielenga  
Janice Campbell  
Masaki Katakai  
Osvaldo Doederlein  
Peter Liu  
Roman Strobl

## Community Support

Robert Demmer  
Bruno Souza

*NetBeans Magazine is  
supported by NetBeans.org*

Java and all Java-based marks are trademarks or registered trademarks of Sun Microsystems, Inc. in the United States and other countries. Although every precaution has been taken in the preparation of this magazine, the publisher assumes no responsibility for errors or omissions, or for damages resulting from the use of the information herein contained.

**R**elease 6.0 is finally here, and the NetBeans Community continues to grow both in the programming and the natural language dimensions. This issue showcases the ever-expanding scope of the IDE and Platform, covering topics from Web 2.0 development to module construction and IDE translations.

One of the main highlights in the roster of new 6.0 features is Ruby development support, which is already attracting major new blood to the NetBeans community. The opening article gives you a thorough overview of the many features already available, which have been making quite an impression among Ruby developers.

However, you don't need to wait for new releases to use other languages in the IDE. There's always the Generic Languages Framework, or Project Schliemann. A new article by Schliemann's most enthusiastic evangelist shows how this once exploratory but now production-quality framework is being used to add language support in areas varying from essential to niche.

As I write, there are NetBeans releases localized to more than 15 languages, and the number is growing. Though English is the modern lingua franca, non-English speaking developers feel much more at home in an IDE in their native language – especially those from developing countries or regions, who in general have less access to foreign-language instruction. An article by one of the leaders of the localization efforts at Sun shows how this is happening, the challenges encountered, and what you can do to help out.

This issue also brings two articles from world experts on the NetBeans Platform. You'll see how the new Visual Library API is being used in the Platform-based blueMarine application as the basis for sophisticated image management components. And another in-depth article covers all you need to know in order to use the IDE, Maven 2 and plugins to build your NetBeans modules – an alternative to the standard Ant-based harness.

Finally, don't miss the detailed article on profiling. By analyzing aspects of a complex project, the author shows how to use the NetBeans Profiler (including its top new features) to gain insights into the workings of your Java applications. You then see how to use this information to identify optimization opportunities and act on them, while keeping tradeoffs and potential problems in context.

Happy coding!

**Leonardo Galvao**





# Contents

04

## **Dynamic Web Development with NetBeans and Ruby**

ROMAN STROBL

Exploring the main Ruby features in the IDE: syntax highlighting, code completion, refactoring, full Rails support, and more

10

## **Advanced Profiling: real-world explorations**

OSVALDO DOEDERLEIN

Using the major new Profiler features in NetBeans 6.0, and applying profiling techniques and best practices in a real-world tutorial

22

## **Spreading the IDE to Many Worlds**

JANICE CAMPBELL

How a global community is making NetBeans more accessible to non-English speaking developers – one language at a time

30

## **Building RESTful Web Services in NetBeans**

PETER LIU

Rapid code generation and testing, invoking 3rd-party services using RESTful components and building client apps with generated JavaScript client libraries

## **Module Development with Maven 2**

EMILIAN BOLD

Fully enabling Maven-based module creation: from basic aspects to building help modules, module suite construction, and branding

38

## **Project Schliemann in the Field**

GEERTJAN WIELENGA

People and projects that are using the Generic Languages Framework to add to NetBeans' variety

47

## **Creative uses of the Visual Library**

FABRIZIO GIUDICI

Using the graph manipulation and visualization API newly introduced in NetBeans 6.0 to solve problems beyond its basic scope

51