Foreword

By James Gosling

The NetBeans IDE has really come a long way in the last few years. Since the first book was written, NetBeans has progressed from a tool with promise (from a small, young company in the Czech Republic) to one of the market leaders in the open source IDE tools space. It's been like watching a child grow and mature over the years and blossom in ways you could have never predicted.
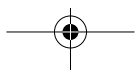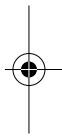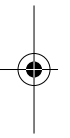
It's a bit like watching Java grow. At first it was a language for the Internet and browsers. It was so versatile, people started using it in many ways. It developed into a great language for writing multi-tier applications. And then with J2EE, it created a whole new ecosystem of enterprise applications. Later, J2ME conquered the phone and mobility market.

NetBeans has been through a similar, multifaceted growth. With NetBeans IDE 4.1, one tool can manage the range of Java development. The IDE now adds J2EE EJB and web services development to the rich suite of development capabilities that service J2SE and J2ME.

I use NetBeans for all my Java development. The exciting new language features in J2SE 5.0 are fun to use and easy to develop with. One of the things that's nice for me personally is that with each release, once I download it, it is ready to go. I don't have go on a treasure hunt and assemble a particular set of plug-ins for me to begin development—as soon as I install NetBeans, I'm ready to start coding.

The PR people at Sun like to call me "the Father of Java." Given that, NetBeans must be my first techno-grandchild. Enjoy all that NetBeans IDE 4.1 provides and the worlds it opens for you. Happy programming.

James Gosling
May 2005

Foreword

By Bill Shannon

The NetBeans IDE was the first free and open source tool to provide support for building J2EE web tier applications five years ago. With the 4.1 release, the NetBeans IDE has advanced even further to include full support for building complete J2EE 1.4 applications, including Enterprise JavaBeans (EJB) components, as well as supporting the key new capability of J2EE 1.4—web services.

EJB components have been a core strength of the J2EE platform from the beginning. The NetBeans IDE now provides support for creating and using EJB components. Developers can create EJB session beans to contain their transactional business logic, and use message-driven beans to create event-driven applications. Developers can also use the powerful database support in the NetBeans IDE to map existing database tables to EJB entity beans, or to create new object models using EJB entity beans and map them to database tables.

The use of web services in the enterprise is expanding rapidly and forms the core of a Service-Oriented Architecture (SOA). A developer using the Net-Beans IDE can easily create simple Java applications that are exposed as web services for others to use, without knowing all the details of web services protocols, Web Services Description Language (WSDL), etc. Similarly, given a WSDL description of a web service developed by someone else, a developer using the NetBeans IDE can easily make use of that web service in his or her J2EE application. Web services are incredibly important to enterprise applications, and the NetBeans IDE makes web services easy!

Deployment descriptors are key to enabling portable enterprise applications, but they can get in the way when developing simple applications. The NetBeans IDE removes the burden of dealing with deployment descriptors

by completely managing them for the developer. Developers never need to think about deployment descriptors when developing and deploying J2EE applications. The NetBeans IDE will automatically and transparently create and manage the deployment descriptors that are needed for the J2EE application being developed.

The NetBeans IDE, when used with the J2EE SDK, provides a complete environment for creating, packaging, deploying, and debugging J2EE applications. The NetBeans IDE uses the J2EE application server from the J2EE SDK, and completely manages the application server for the developer. With a single click the NetBeans IDE will start the application server, deploy the application, and run the application in a mode ready for debugging!

The complexity of managing deployment descriptors is one of the problems recognized by J2EE 5.0, whose major goal is to significantly simplify development of J2EE applications. Version 4.1 of the NetBeans IDE delivers much of that simplification today. Future versions of the NetBeans IDE will further simplify J2EE application development, taking advantage of the improvements in J2EE 5.0.

The success of the J2EE platform is greatly enhanced by tools such as the NetBeans IDE, and J2EE developers will find that they're even more successful with the NetBeans IDE. We look forward to working with the NetBeans IDE team to provide great tools support to deliver on the promise of J2EE 5.0!

Bill Shannon
May 2005