Implementing Distributed Systems with Java and CORBA

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With 27 Figures and 13 Tables

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Preface

This book addresses readers interested in the design and development of distributed software systems with Java and CORBA. The programming language Java, first introduced by Sun Microsystems in 1995 in an attempt to remedy some of the deficiencies of C++, has meanwhile pervaded all fields of software development. CORBA, the Common Object Request Broker Architecture, is an industry standard that enables the platform- and programming language-independent implementation of distributed object-oriented systems.

When developing and testing the examples and exercises for this book, we used three different Object Request Broker products (ORBs) that are available free of charge. The first is JacORB 2.2, a Java object request broker originated in the CS department at Freie Universität Berlin, see `http://www.jacorb.org`. The second one is part of Sun's Java™ 2 Platform Standard Edition 5.0 Development Kit (JDK), see `http://java.sun.com`. The third ORB is OpenORB 1.3.1 developed by the Community OpenORB Project, see `http://openorb.sf.net`. Detailed information on downloading, installing, and customizing these ORBs can be found in Appendix E and at the book's website `http://www.wifo.uni-mannheim.de/CORBA` in subdirectory `ORB`.

Under this URL, one also has the possibility to give feedback, send in corrections, or submit any other suggestions for improvement. In subdirectory `Examples` all the book's examples are provided; in subdirectory `Exercises`, one finds our solutions to the exercises compiled at the end of the chapters. In the examples, we concentrated on the respective CORBA concept to be explained and did not extend and elaborate them to simulate development of real-world applications.

We would like to thank Lisa Köblitz and Michael Schneider for testing the example programs. Lisa also helped us create the figures and illustrations included throughout the book. Colleen Litschke carefully read and reread the text and corrected earlier versions; many thanks for improving our English. Finally, special thanks to Dr. Martina Bihn of Springer-Verlag and her team for the reliable successful cooperation, which we meanwhile have experienced for many years. Financial help from the University of Mannheim's Prechel-Stiftung e.V., who supported us in multiple ways, is gratefully acknowledged.

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