
Contents

Basic Concepts and Terms	1
Context of the Book	15
<hr/>	
Part I Testing Components Context-Independently	
<hr/>	
Testing Polymorphic Behavior of Framework Components <i>Benjamin Tyler, Neelam Soundarajan</i>	33
COTS Component Testing through Built-In Test <i>Franck Barbier</i>	55
COTS Component Testing through Aspect-Based Metadata <i>Alejandra Cechich, Macario Polo</i>	71
Automatic Testing of Exception Handling Code <i>Christof Fetzer, Karin Högstedt, Pascal Felber</i>	89
<hr/>	
Part II Testing Components in the Context of a System	
<hr/>	
A Process and Role-Based Taxonomy of Techniques to Make Testable COTS Components <i>Atif M. Memon</i>	109
Evaluating the Integrability of COTS Components – Software Product Family Viewpoint <i>Anne Immonen, Eila Niemelä, Mari Matinlassi</i>	141
A User-Oriented Framework for Component Deployment Testing <i>Andrea Polini, Antonia Bertolino</i>	169

Modeling and Implementation of Built-In Contract Tests	
<i>Hans-Gerhard Gross, Ina Schieferdecker, George Din</i>	195
Using a Specification Approach to Facilitate Component Testing	
<i>Duane Hybertson</i>	213
A Methodology of Component Integration Testing	
<i>Hong Zhu, Xudong He</i>	239
<hr/>	
Part III Testing Component-Based Systems	
<hr/>	
Modeling and Validation of Publish/Subscribe Architectures	
<i>Luciano Baresi, Carlo Ghezzi, Luca Zanolin</i>	273
Performance Testing of Distributed Component Architectures	
<i>Giovanni Denaro, Andrea Polini, Wolfgang Emmerich</i>	293
A Generic Environment for COTS Testing and Quality Prediction	
<i>Xia Cai, Michael R. Lyu, Kam-Fai Wong</i>	315
Automatic Testing for Robustness Violations	
<i>Christof Fetzer, Zhen Xiao</i>	349
Testing Component-Based Systems Using FSMs	
<i>Sami Beydeda, Volker Gruhn</i>	363
References	381
Index	407

Testing Commercial-off-the-Shelf Components and
Systems

Beydeda, S.; Gruhn, V. (Eds.)

2005, XIV, 410 p., Hardcover

ISBN: 978-3-540-21871-5