

Effective Debugging英文版



[Effective Debugging英文版 下载链接1](#)

著者:【希腊】Diomidis Spinellis

出版者:电子工业出版社

出版时间:2017-7

装帧:平装

isbn:9787121315312

《Effective Debugging英文版: 调试软件与系统的66个有效方法》着眼于一系列可能会在现代软件系统中出现的问题，特别是分散在组件和服务之间，由于复杂的相互影响造成的问题，

通过系统地分类，解释并说明最有效的调试方法、策略、技术和工具，来帮助有经验的程序员加快调试进程。无论你是否正在调试独立运行的错误或灾难性的企业系统故障，本书都将帮助你更快、更轻松地完成任任务。

作者介绍:

目录: 前言 v

致谢 x

作者简介 xiv

Figures xix

Listings xx

Item 11: Minimize the Turnaround Time from Your Changes to Their Result 28

Item 12: Automate Complex Testing Scenarios 29

Item 13: Enable a Comprehensive Overview of Your Debugging Data 32

Item 14: Consider Updating Your Software 33

Item 15: Consult Third-Party Source Code for Insights on Its Use 34

Item 16: Use Specialized Monitoring and Test Equipment 36

Item 17: Increase the Prominence of a Failure's Effects 40

Item 18: Enable the Debugging of Unwieldy Systems from Your Desk 42

Item 19: Automate Debugging Tasks 44

Item 20: Houseclean Before and After Debugging 45

Item 21: Fix All Instances of a Problem Class 46

Chapter 3: General-Purpose Tools and Techniques 49

Item 22: Analyze Debug Data with Unix Command-Line Tools 49

Item 23: Utilize Command-Line Tool Options and Idioms 55

Item 24: Explore Debug Data with Your Editor 57

Item 25: Optimize Your Work Environment 59

Item 26: Hunt the Causes and History of Bugs with the Revision Control System 64

Item 27: Use Monitoring Tools on Systems Composed of Independent Processes 67

Chapter 4: Debugger Techniques 71

Item 28: Use Code Compiled for Symbolic Debugging 71

Item 29: Step through the Code 76

Item 30: Use Code and Data Breakpoints 77

Item 31: Familiarize Yourself with Reverse Debugging 80

Item 32: Navigate along the Calls between Routines 82

Item 33: Look for Errors by Examining the Values of Variables and Expressions 84

Item 34: Know How to Attach a Debugger to a Running Process 87

Item 35: Know How to Work with Core Dumps 89

Item 36: Tune Your Debugging Tools 92

Item 37: Know How to View Assembly Code and Raw Memory 95

Chapter 5: Programming Techniques 101

Item 38: Review and Manually Execute Suspect Code 101

Item 39: Go Over Your Code and Reasoning with a Colleague 103

Item 40: Add Debugging Functionality 104

Item 41: Add Logging Statements 108

Item 42: Use Unit Tests 112

Item 43: Use Assertions 116

Item 44: Verify Your Reasoning by Perturbing the

Debugged Program 119

Item 45: Minimize the Differences between a Working Example
and the Failing Code 120

Item 46: Simplify the Suspect Code 121

Item 47: Consider Rewriting the Suspect Code in Another Language	124
Item 48: Improve the Suspect Code's Readability and Structure	126
Item 49: Fix the Bug's Cause, Rather Than Its Symptom	129
Chapter 6: Compile-Time Techniques	133
Item 50: Examine Generated Code	133
Item 51: Use Static Program Analysis	136
Item 52: Configure Deterministic Builds and Executions	141
Item 53: Configure the Use of Debugging Libraries and Checks	143
Chapter 7: Runtime Techniques	149
Item 54: Find the Fault by Constructing a Test Case	149
Item 55: Fail Fast	153
Item 56: Examine Application Log Files	154
Item 57: Profile the Operation of Systems and Processes	158
Item 58: Trace the Code's Execution	162
Item 59: Use Dynamic Program Analysis Tools	168
Chapter 8: Debugging Multi-threaded Code	171
Item 60: Analyze Deadlocks with Postmortem Debugging	171
Item 61: Capture and Replicate	178
Item 62: Uncover Deadlocks and Race Conditions with Specialized Tools	183
Item 63: Isolate and Remove Nondeterminism	188
Item 64: Investigate Scalability Issues by Looking at Contention	190
Item 65: Locate False Sharing by Using Performance Counters	193
Item 66: Consider Rewriting the Code Using Higher-Level Abstractions	197
Web Resources	207
Index	211
• • • • •	(收起)

[Effective Debugging英文版_下载链接1](#)

标签

调试

评论

[Effective Debugging英文版_下载链接1](#)

书评

[Effective Debugging英文版 下载链接1](#)