

**Featuring a NEW
Technical Program!**

**INTERNATIONAL
EXPERTS:**

James Bach
Satisfice, Inc.

Rex Black
Rex Black Consulting Services, Inc.

Ross Collard
Collard & Company

Elisabeth Hendrickson
Quality Tree Software, Inc.

Dion Johnson
Pointe Technology Group, Inc.

Robert Martin
Object Mentor, Inc.

**IN-DEPTH TUTORIALS
AND WORKSHOPS:**

Test Management and Planning

Introduction to Testing Web
Sites/Applications

Web/eBusiness Security
Testing

A Roadmap for Automating
Software Testing

Rapid Test Planning

Managing Test Execution

Establishing a Test
Automation Framework

Improving Your Test Process
Through Measurements

Test Design Fundamentals

Plus 9 More!

**42 presentations of testing
experiences from leading
software organizations**

Plus

THE TESTING EXPO

Oct. 31–Nov. 1, 2001



INTERNATIONAL CONFERENCE ON
**SOFTWARE TESTING
ANALYSIS & REVIEW**

Oct. 29–Nov. 2, 2001

**San Jose, California, USA
The Fairmont Hotel**

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INTERNATIONAL CONFERENCE ON
**SOFTWARE TESTING
ANALYSIS & REVIEW**

Oct. 29–Nov. 2, 2001

**The Fairmont Hotel
San Jose, CA, USA**

STARWEST 2001: Where real-world testing experience and software expertise come together.

MAKE YOUR SOFTWARE SHINE— ATTEND STARWEST 2001

Superior software testing is more critical to business than ever before. With increased dependence on software reliability, scalability, and performance, it's vital that companies convert software testing into development success.

As the world's premier software testing event, STAR is the industry's largest and most advanced forum. Here you'll learn from international software testing experts, developers, and managers. And what you learn can be applied to boost the quality and success rate of all your development projects. Whether you're a seasoned software tester or just getting started, you'll walk away with a new set of tools designed to help you build and deliver better software. Here are just a few STAR features:

- **Information-packed sessions that cover critical testing issues**
- **Dynamic, insightful industry speakers from a range of backgrounds**
- **Specific ways to improve your testing process and results**
- **The latest tools, products, and services from leading test automation vendors**
- **Networking opportunities with industry experts, colleagues, and solutions providers**

WHO SHOULD ATTEND

- **Software developers and testers looking for automated testing solutions**
- **Software or test managers, quality assurance professionals, and software engineers looking to improve productivity and software quality**
- **Experienced software testers seeking new ways to improve their testing process**
- **Web testers and developers searching for the latest tools and technologies**

PRESENTED BY SQE

STARWEST 2001 is produced by Software Quality Engineering (SQE). SQE assists software professionals and organizations throughout the world in their endeavors to build and deliver better software.

In addition to organizing the STAR conference series, SQE hosts the Applications of Software Measurement (ASM), Software Management (SM), and Software Test Automation conferences. SQE also delivers software testing and development seminars and provides consulting services, specialized publications, and research. Its publishing division produces both *STQE* magazine and the StickyMinds.com Web site.

For a complete list of services, visit our Web site at www.sqe.com.

THE REVIEWS ARE IN. HERE'S WHAT PAST DELEGATES HAD TO SAY:

“The conference is extremely well organized. I believe it's a great experience for testers and developers at all levels — and managers too.”

Phouphet Srioudom
System Test Engineer
Advanced Fibre Communications

“The breadth of topical areas covered offers something for everyone.”

Lori Richards
QA Manager

“This conference revitalized me as a tester.”

Mary Ann Bullock
Senior Systems Analyst
Convergys

STARWEST 2001 EVENT HIGHLIGHTS

LOOK WHAT A STAR EXPERIENCE OFFERS YOU AND YOUR COMPANY!

THE TESTING EXPO
OCT. 31–NOV. 1, 2001

Uncover a Wealth of Testing Resources!

Looking for answers? Take time to explore this one-of-a-kind EXPO, designed to bring you the latest solutions in testing technologies, software, and tools. Attend informative vendor demos and technical presentations held throughout the EXPO to support your software testing efforts.

See the Conference-at-a-Glance (pages 10–11) for a preview of exhibitors.

EXPO Hours

Wednesday, October 31
11:45 a.m.–6:30 p.m.

Thursday, November 1
8:00 a.m.–3:45 p.m.

For Sponsor/Exhibitor news and updates, visit www.sqe.com/starwest.

Build a Conference
That's Just Right For You!

SEE THE CONFERENCE-
AT-A-GLANCE **10-11**

Pages

10-11

TABLE OF CONTENTS



18 IN-DEPTH TUTORIALS & WORKSHOPS

provide classroom-style instruction on key testing topics such as test automation, test management, Web/eBusiness, advanced topics, and much more.



6 FEATURED SESSIONS

offer insight and perspective from respected international testing experts.



35+ EXHIBITORS AT THE TESTING EXPO

feature the latest in testing technology, tools, and services.



42 CONCURRENT SESSIONS

illustrate testing strategies of leading software organizations presented by veteran software testers and developers.



SPECIAL NETWORKING EVENTS

BONUS SESSIONS Thursday, November 1, 6:00 p.m.

The Lighter Side of QA

René Lopez, Cortechs

How to Give More Effective Presentations

Robin Goldsmith, GoPro Management

College Students and Testing: Underinformed and Underutilized

John Lambert, Case Western Reserve University

Certifications for the Software Testing and Quality Professional

D. J. Law, Qwest Communications

CALL 800-423-8378 OR 904-278-0707 TO REGISTER
WWW.SQE.COM

MONDAY, OCT. 29, 9:00-5:00

A Test Management and Planning

Rick Craig, Software Quality Engineering

Effective and timely planning can have a huge impact on your testing success. Rick Craig introduces you to proven test planning methods and techniques, including the master test plan and specific test plans for acceptance, systems, integration, and unit testing. Learn how to manage test activities, estimate test effort, analyze risks, and achieve buy-in. You'll also receive instructor-recommended test measurement and reporting tactics for monitoring and control.



Rick Craig is a frequent speaker at testing conferences and is well received worldwide as a test and evaluation instructor. He has implemented and managed testing efforts on large-scale, traditional, and embedded systems, and he's co-authored a study that benchmarked industry-wide processes.

B Introduction to Testing Web Sites/Applications

Steve Splaine, Splaine and Associates

Many developers and testers are making the transition from testing traditional client/server, PC, and/or mainframe systems, to testing rapidly changing Web applications. This tutorial makes this transition easier by explaining these new technologies and recommending techniques that can be included in a Web site's functional, compatibility, usability, and navigational test plans. Gain an invaluable overview of the most common technologies being used to build Web sites and applications. Learn proven tips and techniques for testing Web technologies, and discover the latest tools available for Web testing.



Steve Splaine is a chartered software engineer with more than 20 years of experience in developing software systems: Web/Internet, client/server, mainframe, and PCs. He is an experienced project manager, tester, and presenter who has consulted at more than 100 companies in North America and Europe. He's also a regular speaker at software testing conferences and lead author of *The Web Testing Handbook*.

C Web/eBusiness Security Testing NEW

Lee Copeland, Software Quality Engineering

Many organizations need to conduct mission-critical business transactions over the Web. Unfortunately, the Internet can be a less-than-secure place to conduct business. How can you ensure that your Web applications and the infrastructure on which they are installed are secure from attack? Gain an insight into the different attack points that a hacker might seek to exploit. Learn what to look for when testing the security of a Web site or application.



Lee Copeland has more than 30 years' experience as an information systems professional in the areas of application development and software process improvement. He has taught seminars and consulted extensively throughout the United States and abroad.

D Software Testing: The Basics

Dale Perry, Software Quality Engineering

Doing software testing after coding is like looking for typos once a book has gone to press. Not only is it ineffective, it's costly. The most efficient testing approach applies sound testing practices throughout the entire software lifecycle. In this tutorial, Dale Perry details a testing lifecycle that parallels the software development lifecycle and focuses on defect prevention as well as early detection. Learn when, what, and how to test, plus ways to improve the testability of your system. Get the basics for implementing a pragmatic, yet systematic, integrated approach to testing software.



Dale Perry has over 25 years of experience in information technology. He has been a developer, DBA, project manager, tester, and test manager. His project experience includes large system conversion, distributed systems, online applications, client/server, and Web applications.

E A Roadmap for Automating Software Testing

Mike Sowers and Tom Wissink, Software Development Technologies

This tutorial is a practical guide for selecting and managing test automation. Mike Sowers and Tom Wissink present core testing tool terminology, concepts, and best practices, while illustrating techniques for evaluating and implementing tools. Live demos are used to illustrate representative, full-function tools. Learn how to effectively integrate tools into the testing process, and examine a best-of-breed list of tool vendors and test automation products.



Mike Sowers has more than two decades of experience in the engineering and quality

fields, with extensive experience in requirements gathering, defect prevention techniques, defect containment approaches, software verification and validation practices, and software engineering methodologies.



Tom Wissink has worked in software development, software configuration management,

systems engineering, integration, and test engineering for 25 years. Prior to joining Software Development Technologies, he was the chief integration and test engineering specialist in Lockheed Martin's Mission System Company, an SEI CMM Level 5 company.

F Test Design Fundamentals

Ross Collard, Collard & Company

With the constant demands of deadline pressures and shifting requirements, good test case design can make the difference between success and failure in a testing effort. Ross Collard explains how to sharpen your deductive skills in order to design workable, reusable test cases with a reasonable assurance of test coverage and reliability. He facilitates a tutorial that gives participants the opportunity to work on a series of real-life testing scenarios and learn a step-by-step process for designing the "best" test cases.



Ross Collard is a consultant specializing in software testing. His current clients include American Express, Citibank, Dell, General Electric, and Nortel. He has a master's degree in computer science from California Institute of Technology and an MBA from Stanford. He also teaches software testing at the University of California Berkeley.

Each selection runs a full day and includes lunch.

Group Workshops: Interactive . . . In-Depth . . . Limited to 30 Students

Registrations will be taken on a first-come, first-served basis.

**G Testing from the Beginning:
Use Cases at Work NEW**

Dean Leffingwell and Jim Heumann, Rational Software

When it comes to getting test professionals involved, the sooner the better is a good rule of thumb. This workshop teaches you how to involve test professionals early in the software development lifecycle by participating in the analysis, review, and refinement of use cases. It's intended for test managers, QA engineers, and test leads who develop and lead testing methodologies within their organizations. The facilitators also describe lessons learned from the application of use-case technology and how they're used at Rational Software to get testers involved on the ground floor in order to effectively avoid problems mid-cycle or later. In this hands-on workshop, learn:

- What use cases are and how they're used to specify functional requirements
- How to write use cases and to review and refine use cases written by others
- Ways to apply the developed use cases as patterns to directly drive the development of system test cases and test procedures



Dean Leffingwell
Dean Leffingwell is a software industry

veteran and author who provides product planning and strategic advisory services to software companies. Recently, he was a senior vice president at Rational Software, where he was responsible for methodology and software process, as well as the company's requirements management and defect tracking products. He's also lead author of *Managing Software Requirements: A Unified Approach*.



Jim Heumann
has worked in the software business

since 1982. He has done analysis, development, design, training, and project management in several organizations of various sizes and industry segments. He is currently a requirements management evangelist at Rational Software, where he specializes in the front end of the software development lifecycle.

H Discovery Zone: A Guide to Software Bug Habitats NEW

Elisabeth Hendrickson, Quality Tree Software, Inc.

Elisabeth Hendrickson has seen numerous species of software bugs. Drawing on real-world examples of bug reports, she uses this forum to reveal tips and techniques for capturing the wiliest and squirmiest of the critters crawling around in your software. In addition to learning to identify leading causes of defects, you'll also discover new approaches to ensuring that once found, the bugs are fixed.

- Software bugs: where they hide, how you find them, and how to tell other people they exist
- Discover the habitats of the most common types of bugs in Windows® applications
- Learn how to make bugs more likely to appear even in a sterile test lab setting



Elisabeth Hendrickson is an independent consultant who specializes in software quality assurance and management. She has more than 12 years of experience working with leading software companies and is the founder of Quality Tree Software, Inc. An award-winning author, she has published more than 20 articles and is a frequently invited speaker at major software quality and software management conferences.

I Test Design by Contract NEW

David Gelperin, Software Quality Engineering

A behavior contract specifies the preconditions, invariants, and postconditions associated with a specific application function. Contract specifications are both precise and easily reviewed. In addition, contracts provide essential test information. Preconditions and invariants are things that test professionals must ensure during setup. Postconditions and invariants are things that test professionals must check after execution.

- A demonstration of a method for the clear and precise specification of software behavior that also makes essential test information easily accessible
- Learn to develop clearly written behavior contracts, reviewing contracts, and designing tests based on contracts
- Receive a "Guide to Behavior Contracting" that contains definitions, guidelines, and contract patterns



David Gelperin has more than 30 years' experience in software engineering, including as lead verification manager on a large automatic test equipment project. He also chaired development of the ANSI and IEEE standards on software testing. He is chief architect of the STEP™ testing methodology.

Due to the interactive nature of these workshops, limited seating is available. Sign up early!

"It's a fabulous opportunity to expand knowledge, gain insight, and brainstorm on our efforts to improve processes."

A Recent STAR Delegate

J **Managing Test Execution** **NEW**

Rex Black, Rex Black Consulting Services, Inc.

Planning, test development, and early involvement in the software lifecycle are important, but at some point the tests must be run. It's this period of time that poses unique challenges for test managers and lead test engineers. Based on nearly two decades of software, hardware, and systems experience, Rex Black covers the essential tools, important techniques, critical processes, and fundamental management skills that people involved in leading or managing test execution phases need to know. Explore some of the challenges — and proposed solutions — test managers may encounter.



Rex Black is president and principal consultant of Rex Black Consulting Services, Inc. He and his associates help clients like Bank One, Dell, Netpliance, Reef, and others with implementation, consulting, training, and staffing for testing and quality assurance projects. His current book, *Managing the Testing Process*, was published in June 1999. His next book, tentatively titled *Critical Testing Processes*, will be published in 2002.

K **Object-Oriented Testing**

Lee Copeland, Software Quality Engineering

Need to shore up your test effort? Lee Copeland describes techniques that exploit object-oriented design principles to help you do just that. He discusses the real-world challenges of testing object-oriented software and provides specific suggestions for overcoming many of the problems. Learn how to vary test coverage to fit diverse needs and resources, and find out how to deal with the testing challenges of encapsulation, inheritance, and polymorphism. Take home a basic object-oriented testing process with recommendations for testing base classes, subclasses, clusters, and frameworks.



Lee Copeland has more than 30 years of experience as an information systems professional in the areas of application development and software process improvement. He has taught seminars and consulted extensively throughout the United States and abroad.

L **Rapid Test Planning** **NEW**

Cem Kaner, J.D., Ph.D., Florida Institute of Technology

A paper-intensive test documentation strategy is useful for some projects, but it can do more harm than good on others. This tutorial is designed to approach test planning based on a need to implement rapid planning or high-volume, automated test strategies. It gives participants examples of standard test planning components (such as matrices), and uses real-life examples to develop all-pairs combination test charts. The primary goal is to help testers figure out what they need to know — and what they should develop — versus simply the mechanics of what to write down to support specific test cases.



Cem Kaner is a professor of computer sciences at the Florida Institute of Technology. He also co-authored the best-selling book *Testing Computer Software*. Cem consults on technical and management issues and practices law within the software development community. He's also certified by ASQ in quality engineering with experience in software development, testing, and user documentation.

M **Web Performance Testing** **NEW**

Dale Perry, Software Quality Engineering

Many organizations are seeking to deploy mission-critical Web sites and applications intended to attract large numbers of revenue generating visitors. This tutorial helps developers, engineers, or testers who are already experienced in testing small-scale Web sites understand the technologies needed to make Web sites more scalable and available. Learn about the automated tools available to assist you in performance testing your site before it goes live and after it's in production. Find out the differences between load testing, stress testing, integrity testing, and endurance testing.



Dale Perry has over 25 years of experience in information technology. He has been a developer, DBA, project manager, tester, and test manager. His project experience includes large system conversion, distributed systems, online applications, client/server, and Web applications.

N **Improving Your Test Process Through Measurements**

Ed Weller, Software Technology Transition

Although testing can account for up to 50% or more of a product's development costs, few organizations accurately measure their test effectiveness or efficiency. Using the Measurement Framework for Software Test, this introductory tutorial covers defect tracking, test effort, test effectiveness and efficiency measures, test progress, testware design measurement, and other elements that give insight into the costs and results of test activities. It approaches these issues from a large development organization's perspective and includes legacy and software maintenance issues. Learn how to accurately evaluate the strengths and weaknesses of your test activities as a basis for improvement.



Ed Weller is a consultant at Software Technology Transition providing business oriented process improvement consulting to software and systems organizations. He formerly managed the software process group at Motorola's Satellite Communications Division. He is an authorized lead assessor in the SEI Appraiser Program, and the program chair for the 2002 Applications of Software Measurement (ASM) conference.

O **Establishing a Test Automation Framework**

Linda Hayes, WorkSoft, Inc.

Linda Hayes presents a detailed implementation approach for test automation that accelerates the development effort, dramatically shortens the learning curve, allows nontechnical analysts to develop and execute automated tests, and even simplifies test library management and maintenance. Learn how this practical and proven approach can be used with any testing tool and how it applies to Web, client/server, and character-based applications. Sample scripts and a demonstration of a completed test library are provided.



Linda Hayes is CEO of WorkSoft, Inc., a software company specializing in test automation. She has more than 18 years of experience in software quality and testing and holds degrees in accounting, tax, and law. Linda is a frequent speaker and award-winning author of books and articles, including a monthly column in *Datamation*.

Each selection runs a full day and includes lunch.

Group Workshops: Interactive . . . In-Depth . . . Limited to 30 Students

Registrations will be taken on a first-come, first-served basis.

P Software Testing Patterns Workshop NEW

Sam Guckenheimer, Elisabeth Hendrickson, and Brian Marick

Patterns are solutions to problems, written in a particular style. They aim to help people who design things such as tests, test suites, test automation systems, and testing organizations. When done well, patterns focus attention on the reasons a solution works. This allows designers to better understand when and how a solution applies, and to better customize a solution to their situation. In this highly interactive workshop, you'll explore:

- The idea of patterns, starting with where they originated — in the architecture of buildings, not software
- How patterns have been applied to software testing, including an in-depth examination of a sampling of software testing patterns
- How collections of patterns, or "languages," can be organized to add further problem-solving power

No previous experience with patterns is required. For more on patterns, visit www.testing.com/test-patterns



Sam Guckenheimer is the senior director of technology for Rational's automated testing products. He is responsible for the product vision and strategy of Rational's software testing products and the formulation of architectural standards for testability.



Elisabeth Hendrickson is an independent consultant and award-winning author specializing in software quality assurance and management. She has more than 12 years of experience working with leading software companies.



Brian Marick, author of *The Craft of Software Testing*, is a consultant concentrating on test design techniques, developer testing, and helping teams and projects understand and manage tradeoffs.

Q Test Process Improvement Using the TPI® Approach

Martin Pol, POLTEQ IT Services B.V.

The Test Process Improvement (TPI) Model gives practical guidelines for assessing the maturity level of testing in an organization plus a step-by-step approach to improve your testing process. The model, dedicated to testing, is complementary to the Capability Maturity Model (CMM). The TPI model consists of 20 key areas supporting different levels of test maturity. The TPI model is used by many Fortune 500 companies worldwide. This workshop's features include:

- An overview of the TPI Model and how to employ it
- How to use a Test Maturity Matrix and set priorities
- Ways to measure your results

(TPI® and TMAP® are registered trademarks of IQUIP Informatica B.V.)



Martin Pol has played a significant role in helping to raise the awareness and improve the performance of testing in Europe. In his

function as R&D manager of IQUIP Informatica B.V., he developed — together with his colleagues — the TMAP® method that has become a standard approach for structured testing, and the Test Process Improvement (TPI®) model. As a senior consultant of POLTEQ IT Services B.V., he provides international testing services.

R Action Word Testing Under Control NEW

Hans Buwalda, LogiGear

The action words approach for testing and test automation has become popular since its introduction in the mid-1990s. In this approach, test development and automated test execution are separated from each other. Spreadsheets are then used to specify tests with a dynamic "test language," resulting in an unparalleled level of manageability and maintainability of the tests. In this workshop, Hans Buwalda, the original architect of Action Words Testing, introduces the approach and presents ways to make it more effective. The ideas and concepts covered are based on observations made in literally hundreds of testing and test automation projects over the years. This easy-to-understand workshop will help you:

- Learn to win and keep necessary customer commitments, many by using effective test policymaking
- Use advanced techniques to deal with difficult but common challenges such as Web applications, legacy and batch systems, load testing, and testing of complex multiplatform environments
- Find new and practical ways to connect the results of your tests to your software and quality processes



Hans Buwalda is a test consultant specializing in test development, automation, and management. He

is the architect of Action Words Testing, an integrated method for testing and test automation, which is now used throughout the industry. He's also an experienced speaker at conferences, tutorials, and workshops, as well as the presenter of such concepts as "The Three Holy Grails of Test Development," "Soap Opera Testing," and "Testing in the Cold."

Due to the interactive nature of these workshops, limited seating is available. Sign up early!

FREE Post-Conference Workshop

Friday, November 2 — 1:30–3:30 p.m.

Kickoff for Change: Applying STAR's Lessons

Robin Goldsmith, GoPro Management, Inc.

With so many presentations and so much to offer, STARWEST 2001 is committed to helping you put new information and techniques into practice. Stay after the conference concludes for a facilitated workshop to help you integrate ideas and organize a plan of action. Participants' input will define the issues and agenda topics. Come prepared to interact and return as your organization's agent for change.



James Bach

WEDNESDAY, OCT. 31, 9:15 AM

James Bach, Satisfice, Inc.

No Best Practices: How to Think About Methodology

How do the things you hear at a conference relate to the choices you make on the job? If you really want to help improve how your projects work, don't be a passive transceiver of "best practices." Instead, be an active thinker who understands why methods work and when to apply them. James Bach illustrates how some often-recommended practices aren't necessarily helpful unless you use your skill and judgment to adapt them to your particular situation.

James Bach is founder and principal consultant of Satisfice, Inc., a software testing and quality assurance company. James cut his teeth as a programmer, tester, and SQA manager in Silicon Valley and the world of market-driven software development. He has worked at Apple, Borland, a couple of startups, and a few consulting companies. These days, he mostly teaches and consults on rapid software testing and test management practices.



Dion Johnson

WEDNESDAY, OCT. 31, 10:30 AM

Dion Johnson, Pointe Technology Group, Inc.

Designing an Automated Web Test Environment

Winner of best presentation and best technical paper at STAREAST 2001, this presentation offers an alternative to the typical automated test scripting method of "record and playback now, enhance the automated environment later." In it, you'll explore an automation system designed for testing Internet applications, along with scripting techniques to enhance the scalability and flexibility of your automated test suite. Dion Johnson also describes what base scripts need to be created, how to optimize the use of scripts through wild cards, and how to create reusable functions to speed up the automation process.

Dion Johnson is a senior test consultant for Pointe Technology Group, Inc. He's responsible for providing IT consulting services that focus on the overall system development lifecycle, with particular focus on the quality assurance and quality control elements. Prior to joining Pointe Technology Group, Dion was with Bell Atlantic, where he led a number of major testing efforts including an automated testing initiative.



Rex Black

WEDNESDAY, OCT. 31, 4:30 PM

Rex Black, Rex Black Consulting Services, Inc.

Create Your Own Luck: Get Organized for Test Success

Some test groups have all the luck ... or do they? Many of the most successful test groups have used organizational tactics and cultural initiatives to "make their own luck" when it comes to testing. Though many factors come into play during any testing project, four of the most critical are: clearly defined roles, early involvement in development, the sharing of test data and tools across test levels, and a project culture that understands and values the test group's contribution. While achieving these goals requires hard work, there are realistic steps test managers can take to construct the type of organization that leads to testing success. Based on his extensive experience with different types of test teams, Rex Black highlights the most effective ones, then maps out measures your team can implement to create their own luck.

Rex Black is president and principal consultant of Rex Black Consulting Services, Inc. He and his associates help clients like Bank One, Dell, Netpliance, Reef, and others with implementation, consulting, training, and staffing for testing and quality assurance projects. His current book, Managing the Testing Process, was published in June 1999. His next book, tentatively titled Critical Testing Processes, will be published in 2002.



Robert Martin

THURSDAY, NOV. 1, 9:00 AM

Robert Martin, Object Mentor, Inc.

Testing in the eXtreme Programming World

Much attention has been given to the topic of lightweight development processes — especially eXtreme programming (XP). Robert Martin explains the concept and significance of a paradigm that believes acceptance tests should be defined by customers, and requires developers to write the unit tests before they write the code. He then separates the difficulties from the benefits inherent in this relatively new discipline. By cutting through the controversy, he's able to address the essential issues such as environmental possibilities and the need for XP. But most importantly, he addresses the question: What is the relevance of software testing and testing professionals within XP?

Robert Martin has been a software professional since 1970. He's president of Object Mentor, Inc., a firm of highly experienced experts that offers high-level, object-oriented software design consulting, training, and development services to major corporations around the world. Co-author of the book XP in Practice, he's also acted as author and chief editor on a number of other texts. Robert is a regular speaker at international conferences and trade shows.



Ross Collard

THURSDAY, NOV. 1, 3:45 PM

Ross Collard, Collard & Company

The Best of the New Testing Techniques

In the testing profession, we live in a blizzard of new ideas, reminders about how to obtain value from old ideas, and other helpful advice. That's part of being involved in a vigorous, fast-evolving field. But which promising leads should a test professional pursue? Ross Collard offers a perspective on the most promising new techniques and ideas from industry and academia. He gives direction on where test professionals and managers should focus in order to improve their effectiveness. He also surveys recent trends in the application of new ideas, and provides examples of where they have — and haven't — worked well.

Ross Collard is a consultant currently working on testing and quality assurance projects for American Express, Citibank, Dell, General Electric, and Nortel. He has a master's degree in computer science from California Institute of Technology and an MBA from Stanford. He teaches courses on testing for the University of California Berkeley.



Elisabeth Hendrickson

FRIDAY, NOV. 2, 9:00 AM

Elisabeth Hendrickson, Quality Tree Software, Inc.

Bug Hunting: Going on a Software Safari

This presentation is about bugs: where they hide, how you find them, and how you tell other people they exist so they can be fixed. Explore the habitats of the most common types of software bugs. Learn how to make bugs more likely to appear and discover ways to present information about the bugs you find to ensure they get fixed. Drawing on real-world examples of bug reports, Elisabeth Hendrickson reveals tips and techniques for capturing the wildest and most squirmy critters crawling around in your software.

Elisabeth Hendrickson is an independent consultant who specializes in software quality assurance and management. She has more than 12 years of experience working with leading software companies and is the founder of Quality Tree Software, Inc. An award-winning author, she has published more than 20 articles and is a frequently invited speaker at major software quality and software management conferences.

STARWEST 2001 CONF

MONDAY AND TUESDAY, OCT. 29-30

18 Pre-Conference Tutorials and Workshops, 9:00 a.m. - 5:00 p.m.

WEDNESDAY, OCT. 31

- 9:00 **Opening Remarks**, Conference Chair — David Gelperin, Program Chair — Lee Copeland, Software Quality Engineering
- 9:15 **No Best Practices: How to Think About Methodology**
James Bach, Satisfice, Inc.
- 10:30 **Designing an Automated Web Test Environment**
Dion Johnson, Pointe Technology Group, Inc.

11:45 **Lunch • Visit the Testing EXPO, 11:45 a.m. - 6:30 p.m.**

Test Management	Test Techniques	Test Automation	Web/eBusiness Testing	Advanced Topics
W1 Challenging Conventional Wisdom Elizabeth Langston, SAS Institute Inc.	W2 Test Progress Reporting Using Functional Readiness Robyn Brilliant, Fannie Mae	W3 Ready to Automate? Bret Pettichord, Pettichord Consulting LLC	W4 Accessibility Testing for Users with Disabilities James Speer, VeriTest	W5 Testing for Software Security Herbert Thompson, Florida Institute of Technology

1:45 **Break • Visit the Testing EXPO**

W6 Establishing Best Testing Practices in Your Organization Michelle Lynn Baldwin, Booz, Allen & Hamilton	W7 Exploratory Testing in Pairs James Bach, Satisfice, Inc. and Cem Kaner, Florida Institute of Technology	W8 First Automated Testing Experience Mohammed Sqalli, Siemens Telecom Innovation Centre	W9 An Introduction to Web Load Testing Jim Hyatt, Spherion	W10 Testing Middleware Communication Platforms: XML to the Rescue? Manish Rathi, Telecordia Technologies
W11 The Change Agent: Leveraging the Testing Role David Capocci, SAFECO Insurance	Double-Track Session!	W12 Enterprise Test Engine Suite Technology James Schaefer, Capital One	W13 Delusions of Grandeur: Is Your Web Site Really Scalable? Jim Hazen, SysTest Labs, LLC	W14 Testing Complex Messaging and Queuing Systems Chip Lawson, CommerceQuest

4:00 **Break • Visit the Testing EXPO**

- 4:30 **Create Your Own Luck: Get Organized for Test Success**
Rex Black, Rex Black Consulting Services, Inc.

5:30 **Reception in the EXPO Hall • Speaker Book Signing**

7:00 **Special Event — A Night of Fun & Discovery at the Tech Museum**

THURSDAY, NOV. 1

- 9:00 **Testing in the eXtreme Programming World**
Robert Martin, Object Mentor,

Test Management	Test Techniques	Test Automation
T1 Is Quality Negotiable? Experiences of an eXtreme Programming Tester Lisa Crispin, BoldTech Systems	T2 Pair Testing: What We Think We Know So Far Noel Nyman, Microsoft	T3 Designing Reusable Automated Tests Edward Mang, Incorporated
T6 User Acceptance Testing: The Overlooked and Underplanned Kevin Au, Wavebend Solutions	T7 The Dangers of Use Cases Employed as Test Cases Bernie Berger, Test Assured, Inc.	T8 The University of Automated Testing Celeste NTE s

11:30 **Lunch • Visit the Testing EXPO**

T10 How to Break Out of the Same Old Routine with Retrospectives Randy Slade, Independent Consultant	T11 Software Code Inspection for Defect Prevention Jasper Kamperman, Reasoning	T12 The eXtreme Test That Possibilities Chuck Valley
T15 DAST: The Diagnostic Approach to Software Testing Hung Nguyen, LogiGear Corporation	T16 Flight Recorders: Analyze and Fix Defects Quickly Oliver Cole, OC Systems, Inc.	Do You See...

3:15 **Break • Visit the Testing EXPO**

- 3:45 **The Best of the New Test**
Ross Collard, Collard & Company

5:00 **Meet the Experts**

6:00 **Bonus Sessions (see page 12)**

REFERENCE-AT-A-GLANCE

FRIDAY, NOV. 2

8:00 a.m. - 3:45 p.m.
The Testing EXPO

Inc.

Test Automation	Web/eBusiness Testing	Advanced Topics
<p>Designing Scalable Test Automation David Smith, Microsoft Corporation</p>	<p>T4 How to Establish a Rapid QA Process for Web Development Patricia Humphrey, Neoforma.com</p>	<p>T5 Theory and Practice in Test Process Improvement at Barclays Bank Kath Harrison, Barclays Bank Plc. and Martin Pol, POLTEQ IT Services B.V.</p>
<p>Path to Personalized Automated Testing Martina Bianco, a.a.</p>	<p>T9 Measuring Your Web Infrastructure to Provide a Better Customer Experience Leon Leong, Netcalibrate</p>	<p>Double-Track Session!</p>

EXPO

<p>Simplest Automated Unit Framework Could Easily Work Mark Allison, Utah State College</p>	<p>T13 Testing an eCommerce Shopping Cart Site Karen N. Johnson, Peapod, Inc.</p>	<p>T14 Enjoying the Perks of Model-Based Testing Ibrahim K. El-Far, Florida Institute of Technology</p>
<p>Double-Track Session!</p>	<p>T17 Learning to Test Wirelessly Geraldine Conley, Golden-Gate Technologies, Inc.</p>	<p>T18 Bottlenecks Exposed: The Most Frequently Found Performance Problems Dan Downing, AppGenesys</p>

EXPO

Testing Techniques

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FRIDAY, NOV. 2

9:00 Bug Hunting: Going on a Software Safari Elisabeth Hendrickson, Quality Tree Software, Inc.

	Test Management	Test Techniques	Test Automation	Test Measurement	Advanced Topics
10:15	<p>F1 Creating Quality From Scratch: How to Build a Testing Organization Eric Patel, Nokia Home Communications</p>	<p>F2 Data in Functional Testing — You Can't Live Without It James Lyndsay, Workroom Productions</p>	<p>F3 Creating an Automated Test Environment for a Wireless System David C. Taylor, Siemens Telecom Innovation Centre</p>	<p>F4 Revealing the Mysteries of Test Measurement David Hutcheson, Abbotgate Ltd.</p>	<p>F5 Concise, Standardized, Organized Testing in Complex Test Environments Gerhard Strobel, IBM Germany</p>
11:15	<p>F6 How to Find the Level of Quality Your Sponsor Wants Sue Bartlett, Step Technology</p>	<p>F7 Introduction to Usability Testing Cheryl L. Nesta, Vanteon</p>	<p>F8 Evolution of Automated Testing for Enterprise Systems Cherie Coles, BNSF Railroad</p>	<p>F9 Managing the Test Effort Using Requirements-Based Testing Metrics Gary Mogyorodi, Starbase</p>	<p>F10 A Framework for Testing Real-Time and Embedded Systems Alan Haffenden, The Open Group</p>

12:15 Wrap-Up Session

1:30 – 3:30

FREE Post-Conference Workshop —
Kickoff for Change: Applying STAR's Lessons
Facilitated by Robin Goldsmith, GoPro Management, Inc.

PLUS See These Exhibitors and Sponsors at the EXPO (Oct. 31-Nov. 1)

Application Development Trends	BetaSoft, Inc.	OC Systems, Inc.	Software Development Technologies
Compuware Corporation	CorTechs, Inc.	OCLC Online Computer Library Center, Inc.	Software Quality Engineering
Dr. Dobb's Journal	Empirix	The Open Group	StickyMinds.com
eTesting Labs	eTesting Labs	Quality Checked Software	STQE magazine
IBM Global Services	Information Balance	Quality Information Systems, LLC	TeamShare, Inc.
LDRA Ltd.	LogiGear Corporation	QualityLogic	TechExcel
McCabe & Associates	Mercury Interactive	Perforce Software, Inc.	TesCom
		RadView Software, Inc.	TestQuest, Inc.
		Rational Software	Tevron, LLC
		Reasoning, Inc.	Vanteon
		Segue Software, Inc.	VeriTest
		SHUNRA Software, Ltd.	Worksoft, Inc.

STARWEST 2001 sponsors who are exhibiting at the EXPO are listed in bold.

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TOPICAL TRACKS— REAL-WORLD EXPERIENCES

The STARWEST conference program is designed to serve the needs of software testing and quality engineering managers and professionals. At STAR, you'll learn the latest strategies, ideas, and techniques being used by leading software organizations. STAR's real-world approach delivers the knowledge and practical skills you need to build and deliver better software.

BONUS SESSIONS

Thursday, November 1, 6:00 p.m.

The Lighter Side of QA

René Lopez, Cortechs

Enjoy a thought-provoking, politically incorrect look at the bits and pieces involved in establishing a software quality assurance process.

How to Give More Effective Presentations

Robin Goldsmith, GoPro Management

This interactive workshop helps current and prospective conference presenters find ways to structure meaningful, effective presentations.

College Students and Testing: Underinformed and Underutilized

John Lambert, Case Western Reserve University

John Lambert offers suggestions that will help educators and companies better integrate testing concepts into existing instructional courses aimed at college students planning to become test professionals.

Certifications for the Software Testing and Quality Professional

D. J. Law, Qwest Communications

Find out why it's important to become certified, how it enhances your career, and what you need to qualify. A detailed analysis of four certification programs (CDQE, CQA, CSTE, and CSTP) for the software testing and quality professional is provided.

1:00 p.m.

W1 Test Management

Challenging Conventional Wisdom

Elizabeth Langston, SAS Institute Inc.

The earth is flat. Man will never fly. These "facts" were believed by reasonable people for thousands of years. But advances in knowledge and technology proved them wrong. Does the software industry have any such "facts"? Elizabeth Langston will explore:

- Whether functional requirements are truly necessary
- Whether or not close relationships with developers will pollute testers' minds
- How test plans improve testing quality — or do they?

W2 Test Techniques

Test Progress Reporting Using Functional Readiness

Robyn Brilliant, Fannie Mae

Are you looking for a way to effectively set the expectations of senior management? The Functional Readiness Matrix (FRM) is a decision-making tool that offers a simple way to represent test progress based on the functional areas or features of an application. By enabling the test team to track actual test progress against the implementation goals established early on, the FRM allows for the presentation of valid test metrics to management in a way they can understand.

- Identify high-risk functional areas
- Set goals for test completeness and defect resolution based on the level of risk
- Track progress and calculate the functional readiness

W3 Test Automation

Ready to Automate?

Bret Pettichord, Pettichord Consulting LLC

Is your organization ready to benefit from automation? The decision to automate your test process can sometimes raise more questions than you expect. What tools do I need? Who should I hire? Do I need to outsource? This presentation will help you determine how your organization can make the best use of test automation. Learn key steps to ensure your automation efforts get off on the right foot.

- Assess your organization's readiness for test automation
- Identify the different types of test automation technologies
- Explore common errors that automation efforts encounter

W4 Web/eBusiness Testing

Accessibility Testing for Users with Disabilities

James Speer, VeriTest

Testers have taken a lead role in providing disabled persons access to computer resources. On behalf of the nearly 20% of Americans with disabilities, companies are now improving the accessibility of their Web sites, hardware, and software products. This presentation describes the regulatory framework for accessibility issues and suggests approaches for testing a range of accessibility aids including screen readers, voice recognition software, refreshable Braille terminals, and alternative point-and-click devices.

- Understand the legal landscape of requirements and industry standards
- Develop test plans and test cases for accessibility
- Learn to resolve and document conflicts in emerging standards

W5 Advanced Topics

Testing for Software Security

Herbert Thompson, Florida Institute of Technology

Software can be correct without being secure. Therefore we must be vigilant in assessing the security implications of software behavior instead of being focused on the search for specification violations. If we want to include security problems in our testing periscope, we must consider the malicious use of functionality that might be possible outside normal use of the product. The goal of this presentation is to challenge current techniques by making the testing process more attuned to, and aggressive towards, security holes.

- Why security bugs are often overlooked
- Critical security vulnerabilities
- Security vulnerabilities specific to Web applications

2:15 p.m.

W6 Test Management

Establishing Best Testing Practices in Your Organization

Michelle Lynn Baldwin, Booz, Allen & Hamilton

The path to best testing practices begins with communication. By building relationships with a product's key players — developers, analysts, and end users — your test team can achieve a higher level of both quality and customer satisfaction. Discover the link between effective communication and implementing critical step-by-step test processes such as test conditions, test case design, test data construction, and reporting.

- Manual versus automated testing
- Building valid and usable test scripts and test cases
- Common problems detected in testing

3:15 p.m.

W11 Test Management

The Change Agent: Leveraging the Testing Role

David Capocci, SAFECO Insurance

How can you help change your corporate culture to appropriately regard the role of testing? In this presentation, David Capocci shows you how to position testing as a valued part of the project team. Since testers provide the expertise in such critical areas as defect detection and prevention, their merit can be leveraged simply by making their function understood by other roles, e.g. developers, business analysts, and project managers. The presenter also shares methods to:

- Publish a framework model that makes testing visible and clear to your audience
- Establish a common language baseline through "in-service" training
- Implement standardized techniques in soliciting and organizing test requirements

W7 Test Techniques

Double-Track Session!

Exploratory Testing in Pairs

James Bach, Satisfice, Inc. and Cem Kaner, Florida Institute of Technology

Exploratory testing involves simultaneous activities — learning about the program and the risks associated with it, planning and conducting tests, troubleshooting, and reporting results. This highly skilled work depends on the ability of the tester to stay focused and alert. Based on a successful pilot study, Cem Kaner and James Bach discuss why two testers can be more effective working together than apart. Explore the advantages of testing in pairs, including ongoing dialogue to keep both testers alert and focused, faster and more effective troubleshooting, and an excellent opportunity for a seasoned tester to train a novice.

- Why two testers can be more effective working together
- How exploratory testers can create charters (agreed, focused plans) for testing sessions
- Examples (what was done and why) from actual sessions

W8 Test Automation

First Automated Testing Experience

Mohammed Sqalli, Siemens Telecom Innovation Centre

Test automation is never as simple as it appears in the written plan. But automated testing is now a main cornerstone in the testing arena. In other words, successful automation is now a must. This session takes you through the automation process step by step, and helps you avoid some of the common pitfalls that occur during a first automation project. It highlights the various issues that will either allow or hinder the highest return from automated testing.

- Setting up the test library: problems, issues, and tools
- Ways to design for testability
- How to define an integration strategy based on proof of concept

W12 Test Automation

Enterprise Test Engine Suite Technology

James Schaefer, Capital One

Many companies have invested heavily in test automation for GUI testing as a way to verify the functionality of their complex client/server and Web applications. Unfortunately, the anticipated cost savings and higher reliability are often not achieved. However, by using their internally developed Enterprise Test Engine Suite Technology (E-TEST) techniques, Capital One tests its software in an environment that's easy to learn, reusable, scalable, supportable, and cost effective. Learn how you can develop your own E-TEST technology with off-the-shelf utilities and commercially available GUI testing tools.

- How to build common data repositories
- The enforcement of object naming conventions using a Data Dictionary and an Object Name Discrepancy report
- The provision of uniform enterprise training to testers

W9 Web/eBusiness Testing

An Introduction to Web Load Testing

Jim Hyatt, Spherion

This session walks participants through the process of Web load testing. Jim Hyatt takes this opportunity to cover everything from what testing tools are available to how to plan for load testing. Get a basic understanding of what Web load testing is and how to do it correctly.

- The purpose of Web load testing
- How — and why — load testing tools work
- How to develop load testing scenario requirements

W13 Web/eBusiness Testing

Delusions of Grandeur: Is Your Web Site Really Scalable?

Jim Hazen, SysTest Labs, LLC

This presentation relates a software test lab's real-world experiences performing load testing for scalability on three Web sites. Besides methodology, it also covers the tools employed, client expectations before launch, and how the findings from the testing were applied to help clients correctly scale their sites. Learn why this type of testing is the most effective way to validate design and hardware architecture, plus identify potholes before they end up on the information superhighway.

- How to set realistic goals for scalability testing
- Practical methodologies for scalability testing
- What to do before, during, and after scalability testing

W10 Advanced Topics

Testing Middleware Communication Platforms: XML to the Rescue?

Manish Rathi, Telecordia Technologies

Middleware has held a significant place in software history since its advent in the 1990s. Today, middleware is being used more and more in the B2B arena. Although XML is touted as the key ingredient to connect autonomous, heterogenous systems together, developers and testers must keep in mind that it's not a silver bullet. This presentation will address the growing interest in middleware-based architecture, along with its benefits, issues, and pitfalls.

- The growing trend of middleware-based platforms
- How to resolve testing issues with middleware applications
- The role of XML in middleware communications

W14 Advanced Topics

Testing Complex Messaging and Queuing Systems

Chip Lawson, CommerceQuest

Speed-to-market tactics with new and enhanced applications can lead to unexpected problems in complex messaging- and queuing-based infrastructures. Now that these types of infrastructures are the most common method for supporting multiplatform and multilayer applications, it's critical that testing be done effectively and quickly. Because Web-based, legacy, terminal, client/server, and other diverse applications often share a platform's common services, the potential for conflict and catastrophic infrastructure failure looms.

- Learn to evaluate your current messaging infrastructure
- Establish proper benchmarks to use in future comparisons
- How to design testing solutions for the entire infrastructure

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10:30 a.m.

T1 Test Management**Is Quality Negotiable? Experiences of an eXtreme Programming Tester***Lisa Crispin, BoldTech Systems*

If you want a higher quality product in an eXtreme programming (XP) project, you must be prepared to pay a higher price. We make decisions and compromises based on quality versus cost every day. Extreme programming teams are driven to do their best work, but customers have the right to specify and pay for only the level of quality they require. This presentation explores ways to resolve these two potentially conflicting points of view.

- How to negotiate quality with your customer
- Ways to resolve internal versus external quality on an XP project
- The role of quality assurance in XP

T2 Test Techniques**Pair Testing: What We Think We Know So Far***Noel Nyman, Microsoft*

Pair programming is advocated by eXtreme programmers as an effective way to create software. But could pair testing be a good way to test software? Several test authorities have tried pair testing in various venues, and Microsoft has funded a controlled experiment to compare pair testing with solo testing. Elisabeth Hendrickson and Noel Nyman discuss the state of pair testing today, what we know about it so far, and how you can benefit from this new and exciting methodology.

- What pair testing is and how it relates to pair programming
- The results of Microsoft's pair testing experiments and other pair testing sessions
- What the experts expect from pair testing

T3 Test Automation**Designing Reusable Test Automation***Edward Smith, Mangosoft Incorporated*

The ability to share and reuse scripts can often make the difference between the success or failure of an automated test project. Using simple design techniques, this presentation illustrates how to use framework architecture to carve up your product into bite-sized reusable operations. Edward Smith presents data on the effectiveness of this approach to automated test design. Learn how to apply framework architecture to maximize code reuse, speed development, and improve the maintainability of your automated tests.

- How to divide your product into reusable objects in shared test libraries
- How to construct a general-purpose test driver to implement a data-driven design
- Use layered design techniques to apply this approach to client/server and peer-to-peer testing

T4 Web/eBusiness Testing**How to Establish a Rapid QA Process for Web Development***Patricia Humphrey, Neoforma.com*

The majority of Web development projects incorporate a start-up scenario that slowly evolves a small group of test engineering roles made up of people with little or no QA experience. However, once management sees that their start-up site demands professionalism to meet user and investor expectations, they begin a desperate search to assemble a competent QA department. Patricia Humphrey presents methods to rapidly launch a productive and effective QA department without adding burdensome processes that slow deployment of products and applications.

- Implement change control without devastating your delivery schedules
- Acquire techniques to stabilize the Web development cycle
- Discover tools and procedures that expedite regression test activity

T5 Advanced Topics**Theory and Practice in Test Process Improvement at Barclays Bank***Kath Harrison, Barclays Bank Plc. and Martin Pol, POLTEQ IT Services B.V.*

How do you obtain buy-in on a test process improvement project in an organization with nearly 2,000 developers? Attend this special double-track presentation and get the inside story of how Barclays Bank Plc. set out to improve their test process, and how they succeeded. Kath Harrison and Martin Pol discuss their first-hand experience, offer recommendations for dealing with obstacles, and put the spotlight on possible pitfalls to avoid. They also detail the method used by Barclay's to implement best process improvement on one of its major Internet applications.

- How to develop, implement, and sustain your test process improvements
- Set the priorities for your improvement activities
- How to measure the benefits

11:30 a.m.

T6 Test Management**User Acceptance Testing: The Overlooked and Underplanned***Kevin Au, Wavebend Solutions*

User acceptance testing is sometimes regarded as the red-headed stepchild of testing. Most of us tend to focus on functional and performance testing, and in doing so forget who it is we're actually developing the application for. Kevin Au makes the case that a formal process for user acceptance testing should be instituted on almost every project. Because no matter how well developed a product is, if the user doesn't like it, it'll soon be shelfware.

- The principles and strategy of user acceptance testing
- Real-world experience and lessons learned from user acceptance testing
- Expected results and exit criteria

T7 Test Techniques**The Dangers of Use Cases Employed as Test Cases***Bernie Berger, Test Assured, Inc.*

Use cases can often help jump start a testing effort, but there can be serious side effects when testers rely solely on use cases as a testing guide. In fact, using use cases can foster the idea that the goal of testing is to ensure that the software works, rather than to find its defects. This is a dangerous precedent to set. This session will dispel the myths and highlight the risks of using use cases.

- Types of defects you'll never find by following a use case
- How use cases can interact with exploratory testing
- Whether use cases can be cross-functional

T8 Test Automation**The Path to Universal Automated Testing***Celestina Bianco, NTE s.a.*

The adoption of a universal automated testing methodology (UAT) can seem a complex and costly prospect at first glance. However, this session describes the many benefits that come with adopting such a tactic, including repeatability, reduced execution time, and relevant documentation. It seeks to prove that though definition and development takes time, in the long run it will deliver a positive return. The presenters walk participants through a "stepped solution" to universal automated testing.

- Measure automated test quality: coverage, reliability, and defect detection
- Liberate test procedures and reports from the tool
- Extract acceptance testing criteria from the automated tests

T9 Web/eBusiness Testing**Measuring Your Web Infrastructure to Provide a Better Customer Experience***Leon Leong, Netcalibrate*

According to Zona Research, companies lose \$4 billion per year in abandoned transactions because of slow Web sites. The customer experience is a critical component of any Web site's success or failure. This presentation focuses on how companies can measure their site's infrastructure in order to deliver the best customer experience possible. It explains how to optimize your Web site by monitoring every user's activities and avoid the "slow zone" to keep customers from abandoning it.

- Uncover behind-the-scenes contributors to performance issues
- Learn how to manage and monitor your systems
- Use the feedback to make positive changes

Double-Track Session!**T5 Advanced Topics****Theory and Practice in Test Process Improvement at Barclays Bank***Kath Harrison, Barclays Bank Plc. and Martin Pol, POLTEQ IT Services B.V.*

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- How to develop, implement, and sustain your test process improvements
- Set the priorities for your improvement activities
- How to measure the benefits

1:30 p.m.

T10 Test Management

How to Break Out of the Same Old Routine with Retrospectives

Randy Slade, Independent Consultant

In a rut with software release problems? This presentation shows you how to use the "Lessons Learned" retrospective process to keep the same old problems from recurring with every new release. Learn from your mistakes; don't repeat them. The Lessons Learned process can be used to evaluate your test process, a completed project or phase, or any event that needs improvement.

- Find out who should be involved in a Lessons Learned session
- Set problem priorities and identify the "big hitters"
- Determine the steps required to develop and implement effective solutions to recurring problems

T11 Test Techniques

Software Code Inspection for Defect Prevention

Jasper Kamperman, Reasoning

Thousands of hours are spent testing, but most software professionals find that traditional testing simply isn't enough to ensure code quality. This presentation gives software professionals a complementary approach: *software inspection*. Learn how software inspection differs from traditional testing, and gain an understanding of principal inspection techniques.

- Types of software defects found through code inspection techniques
- Advantages and disadvantages of the various inspection techniques
- Explore the uses of automated inspection tools and services

T12 Test Automation

Double-Track Session!

The Simplest Automated Unit Test Framework That Could Possibly Work

Chuck Allison, Utah Valley State College

Everyone pays lip service to the importance of unit testing, but rarely do developers actually integrate unit testing into their daily routine. In the spirit of eXtreme programming, this presentation offers a simple two-class framework for automating unit tests in three popular languages: C++, Java, and C. No GUI, no templates, just a fast and productive way of organizing and running suites of unit tests. You'll walk away wondering how you have done without this simple technique for so long.

- See how to implement automated unit testing in an object-oriented development environment
- Make the technique work for you politically and technically
- Get step-by-step illustrations in three popular programming languages: C++, Java, and C

T13 Web/eBusiness Testing

Testing an eCommerce Shopping Cart Site

Karen N. Johnson, Peapod, Inc.

Karen Johnson takes attendees through a shopping session that recreates a number of possible scenarios — and highlights what can go wrong. She'll also explain how to prevent defects from going live on your production Web site. From securing transactions to managing cart contents, this talk is a must for anyone involved in the eCommerce arena.

- Practical insights for testing an eCommerce site
- Identify the "parts" that make up a shopping session
- Employ regression testing by user scenarios

T14 Advanced Topics

Enjoying the Perks of Model-Based Testing

Ibrahim K. El-Far, Florida Institute of Technology

For certain applications, a model-based testing approach offers many advantages, including the ability to generate high volumes of non-repetitive tests, methods to evaluate test regression suites, and the computation of a number of statistical results. It's also able to expose defects that are normally found only with complex sequences of inputs. But all this doesn't come cheap. This presentation helps you understand the resources, training, and tools required to launch this type of testing.

- How finite state machines are used to generate model-based tests
- When to use model-based testing and the tools you'll need
- Potential problems and how to avoid them

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2:30 p.m.

T15 Test Management

DAST: The Diagnostic Approach to Software Testing

Hung Nguyen, LogiGear Corporation

Every test manager knows the pain of testing in a chaotic environment. The DAST (Diagnostic Approach to Software Testing) process allows you to cut through the chaos by implementing a strategic way to test products and releases, even when you don't have good product requirements or documentation. Founded on the premise of asking systematic questions to build test cases, Hung Nguyen takes participants through the process, which ultimately leads to valid requirements, specifications, and test cases.

- Build a testing framework for reusing questions to eliminate redundant work
- Keep the focus on your team's deliverables
- Work from an expert position regardless of process maturity, people's capabilities, and project stability

T16 Test Techniques

Flight Recorders: Analyze and Fix Defects Quickly

Oliver Cole, OC Systems, Inc.

Users find 25% of your defects after your software goes live, according to a recent study. In addition to being expensive to fix, these post-ship defects often prove impossible to find due to the many potential user environments out there. Flight recorders are new tools, named after those already present on aircraft, that trace the execution of an application in or before production. Their job is to collect information *while* the system runs. Then, if a problem or failure occurs, you can examine the trace file and discover what operations led to the problem without actually having to recreate the problem. Attend this session to find out:

- When to use a flight recorder and how to deploy it correctly
- What types of flight recorders are available
- How to effectively implement a flight recorder

T17 Web/eBusiness Testing

Learning to Test Wirelessly

Geraldine Conley, Golden-Gate Technologies, Inc.

Wireless testing is closely related to Web testing, but they are not twins. While wired Web access has settled on a handful of platforms with a few dominant operating systems, the wireless world is still a riot of platforms with a small number of operating systems and a myriad of browsers. There's also no way to test a wireless tool directly the way you can a Web site, because the tools rely primarily on emulators. Geraldine Conley talks about these and other surprising experiences in the wireless testing arena. She also covers the testing processes most affected by wireless technology: document reviews, the change control board, and configuration management.

- Identify the testing areas that are specific to wireless
- Review design documentation developed to communicate for black box test planning
- Where wireless technology complicates the process

T18 Advanced Topics

Bottlenecks Exposed: The Most Frequently Found Performance Problems

Dan Downing, AppGenesys

Dan Downing's experience with stress testing projects has revealed a handful of common denominators present in most Web site performance problems. These include memory starvation; a CPU-gobbling database access; improperly sized heaps, caches, and pools; poor application design; and load balancing that doesn't balance. This presentation uses actual B2C and B2B project examples to show you a symptom-measurement-diagnostic approach to understanding, exposing, and documenting these common problems.

- Identify the top causes of Web site performance bottlenecks
- Learn about tools and techniques for identifying bottlenecks
- Understand where to look first for bottlenecks

10:15 a.m.

F1 Test Management**Creating Quality From Scratch: How to Build a Testing Organization***Eric Patel, Nokia Home Communications*

With more and more companies realizing the need for testing throughout the product development process, there's a growing demand for bigger, better QA teams. If you find yourself the first member of a newly formed department, it's likely you'll be asked to do the testing and build the team simultaneously. This presentation presents a strategy for meeting the day-to-day testing challenges, while planning for the future of the department. It tells you how you can lay the foundation and build the house — all at the same time.

- How to manage the effects of “solitary confinement”
- Ways to balance present testing demands and future challenges
- Effective time management and test planning techniques

F2 Test Techniques**Data in Functional Testing — You Can't Live Without It***James Lyndsay, Workroom Productions*

Good data is a sure-fire solution for improving functional testing. Test data can be structured to enhance understanding and testability. Its contents, correctly chosen, can reduce maintenance effort and allow flexibility. Plus, preparation of the data can focus the business where requirements are vague. The three kinds of test data include environmental, setup, and input. This presentation deals with how to recognize these types of data and the common problems associated with them during pre-test, test, and go-live.

- Advantages and pitfalls of various methods to load data
- Common problems and possible solutions for data maintenance
- Naming conventions for more accurate and easier-to-interpret data

F3 Test Automation**Creating an Automated Test Environment for a Wireless System***David C. Taylor, Siemens Telecom Innovation Centre*

Sound like a challenge? It is. But David Taylor is prepared to show you the way to make it happen. In this presentation he illustrates a practical example of how to test new technologies in the wireless (mobile) sector by creating an automated test environment. He explains how to effectively create access from the tester's computer to the system under test; ways to provide access to all the interfaces so testers can write scripts; and how to maintain the test library.

- How to build the infrastructure for automating wireless testing
- Ways to use commercial test tools for wireless testing
- Problems and solutions for mobile project testing

F4 Test Measurement**Revealing the Mysteries of Test Measurement***David Hutcheson, Abbotgate Ltd.*

Contrary to popular belief, test measurement is not a mysterious art. Rather, it's a vital part of test management. This presentation will assist those new to test measurement — and those that have been intimidated by measurement and its complexities in the past — discover that test measurement can and should be a part of your test plan. Learn metrics and techniques that are easy to understand as well as implement.

- How to devise test preparation measures
- Measurement of test progress — planned, attempted, successful
- Measurement of environmental problems

F5 Advanced Topics**Concise, Standardized, Organized Testing in Complex Test Environments***Gerhard Strobel, IBM Germany*

There's a need for standardized, organized hardware and software infrastructure, and for a common framework, in a complex test environment. Gerhard Strobel focuses on the experience of testing diverse products on many different platforms (UNIX, Windows, OS2, z/OS, OS400) — how they differ and how much they have in common. He explains how to configure and profile test machines, then highlights the technical areas where test efficiency can be increased. He also covers methods of execution control.

- Configure and set up test machines to test across different platforms
- Create granular, self-contained, portable automated test suites
- Develop equivalent tests and test environments for different products and product levels

11:15 a.m.

F6 Test Management**How to Find the Level of Quality Your Sponsor Wants***Sue Bartlett, Step Technology*

The level of quality a product will attain always comes down to a business decision. While testers understand how to ensure a top-notch product, the customer sponsoring the development may balk once time and labor start translating into dollars. Sue Bartlett leads this session designed to help you recognize customer needs — whether stated or implied — and turn them into an effective software testing process. Explore requirements gathering techniques, test efficiency, communication skills, and persuasion tactics.

- Do you have “quality” goals?
- How to turn fuzzy demands into concrete test cases
- A methodical approach to prioritizing testing around quality goals

F7 Test Techniques**Introduction to Usability Testing***Cheryl L. Nesta, Vanteon*

What is usability? Why is it important? If these questions wake you in the middle of the night, then this presentation is for you. Cheryl Nesta discusses the relevance of usability testing within the broad framework of quality assurance and appropriate expectations based on its uses and applicability. Explore methodology, process flow, goal identification, and definition. Real-world examples create a hands-on introductory experience.

- A clear definition of usability
- How to write and set goals for usability testing
- Where to obtain usability reference material

F8 Test Automation**Evolution of Automated Testing for Enterprise Systems***Cherie Coles, BNSF Railroad*

The key to accelerating test automation in any project is for a well-rounded, cohesive team to emerge that can marry its business knowledge with its technical expertise. This session is an in-depth case study of the evolution of automated testing at the BNSF Railroad. From record-and-playback to database-driven robust test scripts, this session will take you through each step of the \$24 billion corporation's efforts to implement test automation.

- Discover your business driver, then use it to appropriately form your vision and process
- How to cultivate a successful partnership with the application development team and the customer
- Return on test automation investment: increased productivity and higher quality testing

F9 Test Measurement**Managing the Test Effort Using Requirements-Based Testing Metrics***Gary Mogyorodi, Starbase*

It's difficult to quantify the true state of a test effort. Often, it's measured by quantity of work combined with deadline compliance. But if this is the case, then the true level of quality remains unknown. The Requirements-Based Testing (RBT) process offers a set of metrics that can be utilized throughout the development cycle. These metrics can provide an accurate picture of the test effort at any given time.

- The derivations of requirements-based test metrics and their impact on the software development process
- How requirements-based test metrics reduce the risk of delivering untested code
- Techniques for writing testable requirements

F10 Advanced Topics**A Framework for Testing Real-Time and Embedded Systems***Alan Haffenden, The Open Group*

What do we mean when we say local, remote, simultaneous, and distributed testing? Alan Haffenden of The Open Group explores the differences, and explains why the architecture of a distributed test execution system must be different from that of non-distributed systems. An overview of POSIX 1003.13 profiles and units of functionality helps advanced users build a good foundation for testing both their real-time and embedded systems.

- The differences between remote, local, and distributed testing
- The architecture of a distributed test execution framework
- How to manage real-time and embedded systems testing with a test execution management system



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