THE FOURTEENTH INTERNATIONAL

INTERNET & SOFTWARE QUALITY WEEK

San Francisco • May 29 - June 1, 2001

Organized by
Software Research Institute

The Internet Wave

It's the driving factor in today's technology growth.

QW2001 aims to face internet and software quality issues directly.

Keynoters and speakers with real-world experience that you can apply immediately.

Fourteen years of serving the SQA community with cutting-edge experience and state-of-the-art technology.

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Windows Developer's Journal

QW2001: The Internet Wave

WELCOME FROM THE CHAIR

The new century has really begun now. There's no escaping the new reality of an internet age.

Growth in the Internet had been a main driving factor in much of what's new and what's valuable in internet quality testing and quality assurance, and in turn for client/server testing and QA. As WebSite complexities grow, so does the need for powerful back-end support. Each area needs the technology of the other.

QW2001's theme The Internet Wave! reflects and amplifies this new reality. The Conference Keynoters have real-world experience that can be used to balance quality and value, our QuickStart speakers' expertise will save you time and effort, and over 80 speakers focus on Technology, Applications, Internet and Management topics.

QW2001 aims to face issues directly. It's an event surely NOT to be missed!

Edward Miller,
Conference Chairman

Who Should Attend

QW2001 is an educational experience aimed at many levels. Attendees should include:

- Lead quality assurance managers and web masters looking for powerful quality testing methods and an opportunity to check out the latest methods and tools.
- Software developers and website developers – beginners and experts alike – who need exposure to authoritative sources for improving their products.
- Programmers, website designers, software developers – anyone who wants to learn more about producing better quality products.
- Managers and senior Technologists who want to catch up on the state-of-the-art in website and software testing and quality assurance.

International Advisory Board

QW2001 papers are selected based on reviews and recommendations from our distinguished International Advisory Board, whose members represent a broad range of expertise in the software and internet quality area from Industry and Academic positions worldwide.

The Quality of the Quality Week Conferences is a direct result of the contribution of these experts. QW2001's Advisory Board includes:

James Bach (Satisfice)
Boris Beizer (Analysis)
Bill Bently (Mu_Research)
Antonia Bertolino IEI/CNR)
Robert Birss (WebTV)
Nick Borelli (Microsoft)
Rita Bral (SR/Institute)
Dr. Cem Kaner (Univ. Florida)
Taz Daughtrey (ASQC/SQP)
Tom Drake (ICCI)
Elizabeth Hendrickson (QualityTree)
Bernard Homes (Tessco)
Bill Howden (UC/San Diego)
Andre Kok (CMG)
Ruth Levy (CRIM)
Peter Liggesmeyer (Univ. Potsdam)
Glen Meisenheimer (SiteROCK)
Atif Memon (Univ. Pittsburgh)
Edward Miller (Software Research Inc.)
Kris Mohan (Intel)
John Musa (Consultant)
Jens Pas (I2B)
Greg Pope (TesCom)
Linda Rosenberg (NASA)
Stefan Steurs (Eurocontrol)
Keith Stobie (BEA Systems)
Dolores Wallace (Wallace Systems)
Mark Wiley (nCUBE)
Denise Woit (Ryerson Polytechnic Univ.)

Participating Companies

Here is a sampling of 100 of the more than 1000 companies that have sent delegates to Quality Week Conferences in the past two years:

3Com, 3M Company, ABN AMRO Bank, Adaptec, Addison Wesley, Adobe Systems, ADP, Agilent, AirTouch, Alcatel, Amazon.com, Amdahl, America Online, Andersen Consulting, AT&T, Austria Telecommunications, Autodesk, Inc., Autotester, Bank of America, Baxter Health Care Corp., Baxter Healthcare Corporation, Becton Dickinson, Belgacom, BellSouth, Boeing, Bomardier, Booz Allen Hamilton, Cabletron, Cambridge Technology, Cap Gemini, Capital One, Dresdner Bank AG, Ecricsson Radio Systems AB, EDS Belgium, Envive Corp., Ericsson, Eurocontrol, European Commission, Gap, Inc., GITEK, Guardian Life, Guidant, Hewlett Packard, IBM, Information Builders, Informix, Inprise Corporation, Intel, Intuit, IQUIP, Johnson Controls, K.U.Leuven, Keynote, KLA Tencor, Logicon, Lucent, Mapquest, Marchfirst, MCI WorldCom, McKesson HBOC, Mentor Graphics, Mercury Interactive, Microsoft, Motorola, Mozilla.Org, NASA, NCR, NetManage Inc., Neuron Data, Nokia, Oracle, Pacific Bell, Philips, PhotoDisc, Inc., Qualcomm, Qualityhouse, Rational, Rockwell Collins, Safeway, Inc., Sage Software, SAIC, Seagate Technology, Segue, Siemens AG, SIM Group Ltd, Soffront Software, Sony, Southwestern Bell, State of California, Sun Microsystems, Syabse, Inc., Technology Builders Inc., ThoughtWorks, Inc., TRW, US Air Force, US Army, US WEST, Veritas, Volvo, WebPLAN, Inc., Wells Fargo Bank, Williams-Sonoma, Xerox, ZiLog, Inc.

REGISTER ONLINE www.qualityweek.com/QW2001

KEYNOTE SPEAKERS

Wednesday, May 30, Thursday, May 31 & Friday, June 1

8:30 - 10:00, Wednesday, May 30

1P1 **Test Automation – State of the Practice** Mr. Ed Kit, SDT Corp.

In a world of constantly changing technology, how we do business is changing - and how we need to test. Kit summarizes key shifts in software test automation and will present a new automation model which includes an integrated set of testing processes and techniques.

1P2 **The Three "Holy Grails" of Test Development (...adventures of a mortal tester...)** Mr. Hans Buwalda, CMG

In the test development process, there are some important choices to make, which tend to have a key in the influence on its success. These choices can be compared with "Holy Grails". The Holy Grail is part of the ancient English legend of King Arthur and the Knights of the Round Table. It is a symbol for something that can be strived for, but not easily be reached. This is also true for at least some of the choices to be handled in the development process. In the talk three main topics will be presented, that have proven in practice to be the most important issues to address.

8:30 - 10:00, Thursday, May 31

5P1 **Independent Verification And Validation Implementation At NASA** Dr. Linda Rosenberg, GSFC NASA

This paper will discuss the management approach taken to consistently apply IV&V on NASA projects. We will discuss the development of the NASA policy stating that all projects and programs with few exceptions shall employ software V&V techniques for risk mitigation; criteria shall be applied to determined if IV&V is warranted. The IV&V selection criteria are based on determining the extent of risk. Developed by an Agency wide group, the criteria provide an algorithm for estimating probability of software failure based on quantitative software complexity, development team, management, and other factors.

5P2 **Issues In Design and Validation of Modern eBusiness Systems** Dr. Dalibor Vrsalovic, Intel Corporation

Silicon economics helps in reducing cost of building modern eBusiness systems. However, year after year, the ongoing operations and software maintenance cost is killing many of the Internet based business models. This is due to two major facts: high complexity of new eBusiness systems, and low level of design, verification and management tools involved. In other words there is too little automation, and too much manual labor involved. This talk will discuss modern trends in Internet systems architecture. It shows how higher level system abstractions could save both time and cost during the design, building, validation and operations of eBusiness systems. Author will also discuss a concrete example of a high level system model and its benefits.

10:30 - 12:30, Friday, June 1

QWE2K Best Presentation

10P1 **The Need For Speed: Automating Functional Testing In An eXtreme Programming Environment** Ms. Lisa Crispin, Tensegrent

Testing in a Web environment can feel like leaping out of a plane. Testing in an XP environ ment feels like competing in a sky-surfing competition. Like an extreme-sports competitor, the XP tester needs courage, speed, stamina and creativity. Working with the developers and with input from an automated test tool vendor, I have developed an approach to designing modularized, self-verifying tests that can be quickly developed and easily maintained. I'll present my basic design and give some examples.

10P2 **Internet Quality of Service (QoS): The State Of The Practice** Mr. David Lilly, siteROCK Corporation

The Internet is well established as a proven platform for business efficiencies: a transforming tool. No major corporation in the world today operates without some reliance on the Web: for communications with employees, customers, suppliers, and industry partners; the sale of products and services; or after-the-sale support. The Internet is entrenched as an arena where ideas and money are exchanged, and at speeds unimaginable just a decade ago.

10P3 **Riding The Wave – The Future For Software Quality** Mr. Thomas Drake, Integrated Computer Concepts, Inc.

How will the software quality market evolve over the next few years? What is at stake? What is it going to take? Internet, the Web, and e-Business are increasingly demanding higher and higher levels of quality for network-based software systems with less and less mean time between failures. The impact of poor quality and less than robust systems increasingly affect the bottomline for many businesses. A lot has happened to improve the situation and new methodologies and new tools for improving software quality have emerged in the last few years, but I would suggest that radical new approaches and initiatives must be created and adopted if the desirable quality levels to support the e-Economy are to be truly realized and especially at the Internet and global level.

More Detailed Keynote Abstracts ONLINE . . . Click on Paper Titles!

Ed Kit

Edward Kit, founder and president of Soft ware Development Technologies, is well known as a test expert, author, and keynote speaker. His book, "Software Testing in the Real World: Improving the Process," has been adopted as a standard by companies around the world.

Hans Buwalda

Hans Buwalda is project director at CMG, a leading European information technology services group. He is responsible for new developments around the TestFrame approach for testing and test automation of which he is the main architect. The approach has been started by him in 1994. Since then the method is being used in an increasing number of countries.

Linda Rosenberg

Rosenberg is the division chief of the Software Assurance Technology Office (SATO) in the Office of Systems Safety and Mission Assurance Directorate at Goddard Space Flight Center (GSFC), NASA. She also serves as the Software Assurance technologist for GSFC and NASA.

Dalibor Vrsalovic

Dalibor F. Vrsalovic is a Vice President and Chief Technology Officer of Intel's New Business Group. In this position, Dr. Vrsalovic has responsibility for the long-range development of the architecture for Internet services and systems and for working with internal and external technology vendors to ensure a continuing stream of innovation for Intel's Internet platforms and services.

Lisa Crispin

Lisa Crispin has 18 years experience in the industry with the last 9 in Testing and Quality Assurance. She began her career as a programmer with the University of Texas Data Processing Division, where she helped develop the Online Catalog and circulation systems. Her QA experience is with database, 4GL and client/server software on UNIX, NT and Windows. She has many years of experience training both technical and end users.

David Lilly

David Lilly is the Chief Operating Officer of siteROCK Corporation. Dave has over 20 years of technical-based project and account management experience, including heading projects for major industry leaders such as IBM, Sun Microsystems, General Electric, DEC, and General Motors. He most recently served as the COO of NONSTOP Solutions, Inc. He also founded and managed the largest division of Integrated Automation and was president of Teknekron Customer Information Solutions.

Thomas Drake

Tom Drake is a software systems quality specialist and management, and information technology consultant for Integrated Computer Concepts, Inc. (ICCI) in the United States. He currently leads and manages a U.S. government agency-level Software Engineering CenterAEs quality engineering initiative. In addition, he consults to the information technology industry on technical management and software engineering and code development issues.

Tuesday, 29 May, 2001

8:30 - 12:00

A1 Software Inspection For The Internet Age: How To Increase Effect And Radically Reduce the Cost – Part I

Mr. Tom Gilb, Result Planning Limited

Software Inspections were initially (1973 and on at IBM) used to clean up bugs, and to get some quantitative insight into bugs that might be introduced into testing and the field. This seminar will focus on a radical transformation of the original inspection. We do not even try to clean up bad work!

- Streamline inspections through sampling and measurement focus
- Refocus on defect prevention, not debugging
- The one hour flat Silicon Valley version of Inspection

B1 Writing Good Requirements

Mr. Erik Simmons, Intel Corporation

- Discuss and choose from different techniques to specify requirements
- Improve written requirements and tell good requirements from bad ones
- Write non-functional requirements so they are verifiable

C1 A Roadmap To Distributed Client-Server Software Reliability Engineering

Dr. Norman F. Schneidewind, Naval Postgraduate School

- Software Reliability Engineering
- Distributed Client-Server Systems
- Software Reliability Standards

D1 Web Testing Techniques and Tools – Part I

Mr. Gualtiero Bazzana, ONION, S.P.A

- The tutorial focuses on testing methods and tools which can be successfully applied to the testing of Web-based applications, notably, presented from a technical point of view
- Internet WWW servers
- Intranet dynamic applications
- Extranet 3Ocommerce application

E1 Getting Started – Stressing Web Applications: Stress Early – Stress Often

Mr. Robert A. Sabourin, AmiBug.Com

This tutorial outlines very practical steps to follow when setting out to stress web applications. Real examples from recent e-commerce projects are described - what works - what does not work - when to use what tools or technique?

- Stress Testing
- Load Testing
- Performance Testing

F1 Test Estimating

Mr. Ross Collard, Collard and Co.

- Test Estimating Techniques
- What you Need to Know to Estimate the Testing Effort
- Guidelines for the Estimating Process

G1 The Quality Challenge For Network Based Software Systems

Mr. Thomas Drake, Integrated Computer Concepts, Inc.

- Internet quality for network centric systems
- Enterprise testing,
- Quality network systems theory

12:00 - 1:30 -TUTORIAL DAY LUNCH AND NETWORKING

More Detailed Tutorial Abstracts ONLINE . . . Click on Paper Titles!

Tom Gilb

Tom Gilb is a independent consultant, teacher and author. He works mainly in UK, Europe and North America he is a resident of Norway. Tom coined the term "Software Metrics' with the publication of his book of the same name in 1976.

Erik Simmons

Erik Simmons has 15 years experience in multiple aspects of software and quality engineering. Erik currently works as a Platform Quality Engineer within the Corporate Quality Network at Intel Corporation. He leads the corporate Software Engineering Process Team that is charged with improving software development capabilities across Intel's product development groups, and is responsible for Intel's product requirements engineering practices.

Norman Schneidewind

Dr. Norman F. Schneidewind is Professor of Information Sciences and Director of the Software Metrics Research Center in the Division of Computer and Information Sciences and Operations at the Naval Postgraduate School, where he teaches and performs research in software engineering and computer networks.

G. Bazzana

Gualtiero Bazzana is Partner and Managing Director of ONION S.P.A., an Italian SME specialized in software communications, technologies, consulting in the fields of telecommunications, MIS, data processing, process control, etc.

Robert Sabourin

Robert Sabourin (rsabourin@amibug.com) is an author, lecturer, and president of AmiBug. Com, a firm specializing in software management consulting, teaching, and professional development. Robert is the author of the popular children's book I am a Bug (ISBN 0-96857 74-0-7) which explains what SQA folks really do at work.

Ross Collard

Ross Collard specializes in software testing and QA. He is currently working as a testing consultant for American Express, AT&T, Cisco, IBM, Intel and Lucent. His set of books on software testing will be published next year.

Thomas Drake

Tom Drake is a software systems quality specialist and management, and information technology consultant for Integrated Computer Concepts, Inc. (ICCI) in the United States. In addition he consults to the information technology industry on technical management and software engineering and code development issues.

Tom Gilb

Tom Gilb is a independent consultant, teacher and author. He works mainly in UK, Europe and North America he is a resident of Norway. Tom coined the term "Software Metrics' with the publication of his book of the same name in 1976.

Bill Deibler

Bill Deibler has 20 years experience in the computer industry, primarily in software and systems development, software testing and SQA. Bill has extensive experience in managing and implementing CMM- and ISO 9000-based process improvements in software engineering environments.

John Musa

John D. Musa is an independent consultant. He gives courses in software reliability engineering on a world wide basis. He has extensive experience as a software developer and manager. He has published over 80 papers and is principal author of the highly-acclaimed pioneering book "Software Reliability: Measurement, Prediction, Application".

G. Bazzana

Gualtiero Bazzana is Partner and Managing Director of ONION S.P.A., an Italian SME specialized in software communications, technologies, consulting in the fields of telecommunications, MIS, data processing, process control, etc.

Edward Miller

Edward Miller is Founder and CEO of Software Research, Inc. He has worked in software quality for 30 years. He is a pioneer in the development of automated software testing methodologic. He developed the first automated testing tools and internet QA tools. He is the author of "Software Testing and Validation Techniques."

Cem Kaner

Cem Kaner, PhD. consults on technical and management issues and practices law within the software development community. He is Professor of Computer Sciences at the Florida Institute of Technology.

Edward Kit

Edward Kit, founder and president of Soft ware Development Technologies, is well known as a test expert, author, and keynote speaker. His book, "Software Testing in the Real World: Improving the Process," has been adopted as a standard by companies around the world .

1:30 - 5:00

A2 Software Inspection For The Internet Age: How To Increase Effect And Radically Reduce the Cost – Part II

Mr. Tom Gilb, Result Planning Limited

See A-1 program description.

B2 Making the CMM Work: Streamlining the CMM for Todays Projects and Organizations

Mr. Bill Deibler, Software Systems Quality Consulting

- CMM, Process Assessment, Capability Maturity Model
- ISO 15504, ISO 12207, Software Process Improvement, Software Quality Models
- Software Quality Assurance, Tailoring, Small Projects

C2 More Reliable Software Faster And Cheaper

Dr. John D. Musa, Consultant

Software reliability engineering (SRE) can help those who are stressed out by competitive pressures to produce more reliable software faster and cheaper. It is a standard, proven, widespread best practice with substantial benefits that has been used successfully

- Testing
- Operational profiles
- Software reliability engineering

D2 Web Testing Techniques and Tools– Part II

Dr. Gualtiero Bazzana, ONION, S.P.A.

In this part, special emphasis will be given to:

- Web accessibility initiative guidelines
- Experience report from the adoption of presented techniques and tools

E2 Client-Side WebSite Testing

Dr. Edward Miller, eValid

- In the past few years WebSites have grown from simple, static collections of HTML pages to complex pieces of software using advanced technologies including ASP, XML, script languages, e-commerce and more
- Testing of such complexity is a forever-growing challenge
- Testing of passive vs. interactive pages & static vs. dynamic pages will be explored
- The use of a 'Test Enabled Web Browser' will be emphasized as the most effective way of realistically testing most WebSites

F2 Teaching Testing: A Skills-Based Approach

Dr. Cem Kaner, Florida Institute of Technology

- Training software testers involves teaching culture, vocabulary, concepts and skills
- We know what many of the basic testing skills are, but we can improve our training of them
- Skills are trainable. This session explores techniques for training key testing skills

G2 Establishing a Fully Integrated Test Automation Architecture

Mr. Ed Kit, SDT Corporation

- Discover the components of an effective test automation architecture
- Learn how to bridge test design and automation to provide an integrated test solution
- Understand the balance between process and technology
- Learn how to design and document highly inspectable tests
- Share experiences
- Examine a Web-based case study

5:00 - 6:00 WELCOME NETWORKING RECEPTION

WEDNESDAY, May 30 - Day 1

KEYNOTES

8:30 - 10:00

Conference Introduction
Dr. Edward Miller, Conference Chair

1P1 **Test Automation – State of the Practice**
Mr. Ed Kit, SDT Corporation
In a world of constantly changing technology, how we do business is changing - and how we need to test. Kit summarizes key shifts in software test automation and will present a new automation model which includes an integrated set of testing processes and techniques.

1P2 **The Three "Holy Grails" of Test Development (...adventures of a mortal tester...)**
Mr. Hans Buwalda, CMG
- Key considerations for test development
- Suggestions to improve the test process
- Implications for management and control

10:00 - 10:30 & 3:00-3:30
COFFEE BREAKS IN EXPO HALL

5:00-6:00 PANEL SESSION

4P **How Do You Test Internet Software?**
Mr. Brian Lawrence, Coyote Valley Software
- What is working testing Internet software
- How to analyze the your situation to help form a testing strategy
- Experience reports on Internet testing from the real world

5:00 - 6:30
EXPO COCKTAIL RECEPTION

Enjoy light snacks and California wines and beers while you explore state-of-the-art tools and services.

TECHNOLOGY / APPLICATIONS

10:30 - 12:00

OO Automation Applications

2T1 **In Browser WebSite Testing: The Client-Side Approach**
Mr. Tobias Mayer, eValid, Inc.
- 99% of Websites (html, etc. pages) are viewed from a Browser.
- In testing such Websites, the Browser-based testing method is recommended for accuracy and reliability.
- The talk will demonstrate: Load Testing, User Interactivity Testing, Content Validation & Verification, Download Timing, Rendering, and Security/e-commerce Issues in this context.

2T2 **An Integrated System Test Environment**
Dr. Nancy Eickelmann & Mr. Allan Willey, Motorola Labs
- Automated Test Environments
- COTS tool integration
- System test technologies

Conformance and Internationalization

2A1 **Getting Started With Model-Based Testing**
Mr. Harry Robinson, Microsoft
- How to improve your effectiveness through model-based testing
- How to test with models from Day One of your project
- How to keep "growing" your models so that they keep finding bugs

2A2 **Using The W Model To Institutionalize Inspections, And Improve Knowledge Transfers**
Mr. Klaus Olsen, Softwaretest.dk
- We want to build quality into the system
- Defect prevention instead of defect detection
- Knowledge transfer

1:30 - 3:00

Hi-Tech Testing

3T1 **Defect Reduction Using Orthogonal Defect Classification Methodology**
Mrs. Manjula Madan, Philips Software Centre, Bangalore
- Automated Test Environments
- COTS tool integration
- System test technologies

3T2 **Model-based Approach To Security Test Automation**
Dr. Mark R. Blackburn, Mr. Robert Busser, Mr. Aaron Nauman, & Dr. Ramaswamy Chandramouli, Software Productivity Consortium
- Test Automation Technology and Experience
- Security Functional Testing
- Test Engineering using Model

Using Technology

3A1 **Beta Testing With Rapid Development**
Mr. Ralph Dalebout, IBM Printing Systems Division
- Traditional Beta Test processes don't work well in today's rapid development environment.
- There is a new Beta Test approach which embraces a "total solution" focus.
- The preliminary results of the new Beta Test approach have been very positive for IBM.

3A2 **Assuring Quality In Outsourced Software**
Mr. Roger M. Records, Boeing Commercial Airplane Group
- Knowledge, experience and skills required to achieve successful subcontract management
- Definition of seven essential subcontract management functions to ensure quality products
- Maximize quality assurance with high leverage QA reviews for both products and processes

3:30 - 5:00

Test Automation

4T1 **A Universal Metrics Repository**
Prof. Warren Harrison, Portland State University
- Benchmarking
- Decision Support
- Empirical Studies

4T2 **Test Effort Estimation Using Use Case Points (UCP)**
Mr. Suresh Nageswaran, Cognizant Technology Solutions CTS
- Test Effort Estimation
- Use Case Points

Production Modes

4A1 **Using Test Data To Calculate Software Reliability Growth** Mr. Henk Keesom & Dr. John Musa, Ortho-Clinical Diagnostics
- Software Reliability Engineering
- CASRE - Computer Aided Software Reliability Engineering
- Use of Product Development Historical Data

4A2 **Product Triage: A "Medical" Approach To Predicting And Monitoring Product**
Mr. Erik Simmons, Intel Corporation
- The medical field of trauma care provides interesting and valuable metaphors for product quality.
- By adapting the tools and concepts used within trauma care to product quality rather than patient outcome, a new and disciplined approach to predicting and monitoring product quality emerges.

QW SPECIAL EVENT

A night of entertainment at the newly opened Pacific Bell Park. Season tickets are sold out. Witness San Francisco Giants vs. Arizona Diamondbacks, Wednesday, May 30 at 7:00pm

Pacific Bell Park
24 Willy Mays Plaza
San Francisco, CA 94107

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WEDNESDAY, May 30 - Day 1

INTERNET | MANAGEMENT | QUICKSTART

10:30 - 12:00

2

E-Commerce Experience

2W1 **Quality in a Dotcom Startup – Fact or Fiction?**
Mr. Adrian Cowderoy, ProfessionalSpirit Ltd
- Fighting the problems of speed, innocence and changes in objectives.
- Enhancing existing methods with ideas from else where.
- Integrating quality and brand.

2W2 **Innovative Web Test Process & Control Tool**
Mr. Todd Hsueh, IBM
- Web Test Lessons Learned
- Development-to-Testing Trilogy
- Process Control for Quality with Speed

Managing Testing

2M1 **A Requirements-Based Approach To Delivering E-Business And Enterprise Applications**
Mr. Scott Jefferies, Technology Builders, Inc.
- Minimize application failure and revenue loss and maintain loyal customers
- Shorten development timeframe, decrease costs and improve application quality
- Integrated requirements-based approach that enables project teams to optimize

2M2 **Pre-Defining Success: Incorporating eMetrics Into Business And Technical Requirements For Web And e-Business Solutions**
Mr. Robert Benjamin, Ms. Ruth Pennoyer & Ms. Karen Law, Spherion Corporation
- Requirements Management
- eBusiness
- Risk Managemnet

2Q **Extreme Programming Explained**
Mr. Kent Beck, Author
- Programmers need their own tests to maintain speed and flexibility.
- These tests may improve quality enough that QA is no longer needed as a Great Wall to protect the customers against the depredations of the Mongrel Programmer Hordes.
- QA can then take the initiative in enhancing communication between business and development

DOUBLE SESSION

1:30 - 3:00

3

WebSite Performance I

3W1 **Performance Testing Applications In Internet Time**
Ms. Nancy Landau, Alltel Technology Services
- Standardizing test processes
- Profiling applications and user workflows
- Working with diverse development teams

3W2 **Modeling The Real World For Load Testing Web Sites**
Mr. Steve Splaine, Splaine & Associates
- Concurrent users - why do they make a difference
- Can you/should you play with "Think Times"?
- The effect of cookies, SSL and client-side connections on load generators

Process Feedback

3M1 **Six-Sigma Meets Extreme Programming: Changing the Way We Work**
Mr. Timothy Kelliher, Dr. Daniel Blezek, Mr. William Lorensen & Dr. James Miller, GE Research & Development
- Six Sigma Applied To Software
- Extreme Programming in Practice
- Changing Group Behavior

3M2 **Investigating The Applicability Of The Taguchi Method To Software Development**
Ms. Elli Georgiadou, Middlesex University & Ms. Naomi Barbor, University of North London
- Quality Engineering and Experimental Methods
- Taguchi made simple through novel visualizations
- Applicability of Taguchi Method to Software Development

3Q **Planguage: A Defined Language for Clearer Requirements and Design**
Mr. Tom Gilb, Result Planning Limited
- A new requirements-and-design specification language
- Focus on stakeholder-driven value and quality
- Control over cost and time

DOUBLE SESSION

"The conference was very well managed and very informative. The quality of the talks and the exhibits were very good."

– Larry Berstein (President, National Software Council, USA)

3:30 - 5:00

4

WebSite Performance II

4W1 **Why Is API Testing Different**
Mr. Nikhil Nilakantan & Mr. Ibrahim K. El-Far, Florida Tech
- Understand the challenges of API testing
- Study realistic usage scenarios
- Build API test automation

4W2 **Best Practices in Web Performance Testing: "Not Optional Anymore!"**
Mr. Phil Hollows, RadView Software
- Benefits of Component Testing before QA
- How to Manage Scalability and Verification Resources
- Reduce cost and speed the process with lifecycle verification

Intellectual Property

4M1 **How Testers Can And Should Drive Development Cycles**
Mr. David Fern, Micros Systems Inc.
- Test/QA should drive the development cycles.
- Build every week as if you are building a release candidate and grade it accordingly.
- Establish a weekly bug triage process to direct the engineering focus.

4M2 **Managing The Proportion Of Testers To Developers**
Dr. Cem Kaner, Florida Institute of Technology
- Magic ratios, like 1 tester per programmer, don't reflect project context
- The ratio should reflect the actual division of labor between testers and others
- Low ratios of testers to other developers may be better than higher ratios

4Q **Establishing A Wireless Telecommunication Test Automation System**
Mr. Greg Clower, SDT Corporation
- Building an environment to successfully test intelligent network peripherals presents an array of complex problems to resolve.
- Learn how a test automation approach allows the software engineer control over the peripheral interfaces.
- Discover how this approach provides for function testing as well as scalability for automated performance, load and stress testing.

DOUBLE SESSION

WEDNESDAY, May 30 - Day 1

Time	PLENARY SESSION	TECHNOLOGY	APPLICATIONS
8:30-10:00	**1** Conference Introduction by Chairman – Edward Miller, Software Research, Inc. 1P1 Test Automation – State of the Practice – Ed Kit, SDT Corporation 1P2 The Three "Holy Grails" of Test Development (...adventures of a mortal tester..) – Hans Bulwalda, CMG		
10:00-10:30	REFRESHMENTS IN EXPO HALL EXPO HOURS: 10 - 6 p.m.		
12:00-1:30	CONFERENCE LUNCH & NETWORKING IN EXPO HALL		
		OO Automation Applications	**Conformance and Internationalization**
10:30		2T1 In Browser Website Testing: The Client-Side Approach – Tobias Mayer, eValid, Inc.	**2** 2A1 Getting Started With Model-Based Testing – Harry Robinson, Microsoft
11:15		2T2 An Integrated System Test Environment – Nancy Eickelmann & Allan Willey, Motorola Labs	2A2 Using The W Model To Institutionalize Inspections, And Improve Knowledge Transfers – Klaus Olsen, Softwaretest.dk
		Hi-Tech Testing	**Using Technology**
1:30		3T1 Defect Reduction Using Orthogonal Defect Classification Methodology – Manjula Madan, Philips Software Centre, Bangalore	**3** 3A1 Beta Testing With Rapid Development – Ralph Dalebout, IBM Printing Systems Division
2:15		3T2 Model-based Approach To Security Test Automation – Mark R. Blackburn, Robert Busser, Aaron Nauman, & Ramaswamy Chandramouli, Software Productivity Consortium	3A2 Assuring Quality In Outsourced Software – Roger M. Records, Boeing Commercial Airplane Group
		Test Automation	**Production Modes**
3:00-3:30	REFRESHMENTS IN EXPO AREA	3:30 4T1 A Universal Metrics Repository – Warren Harrison, Portland State University	**4** 4A1 Using Test Data To Calculate Software – Henk Keesom & John Musa, Ortho-Clinical Diagnostics
4:15		4T2 Test Effort Estimation Using Use Case Points (UCP) – Suresh Nageswaran, Cognizant Technology Solutions CTS	4A2 Product Triage: A "Medical" Approach To Predicting And Monitoring Product – Erik Simmons, Intel Corporation
5:00-6:30	EXPO RECEPTION Drinks and hors d'oeuvres		
5:00-6:00	**SPECIAL PANEL SESSION**	4P How Do You Test Internet Software – Brian Lawrence, Coyote Valley Software (PANEL SESSION)	

THURSDAY, May 31 - Day 2

Time	PLENARY SESSION	TECHNOLOGY	APPLICATIONS
8:30-10:00	**5** Plenary Session Introduction: Edward Miller, Software Research, Inc. 5P1 Independent Verification And Validation Implementation At NASA – Linda Rosenberg, GSFC NASA 5P2 Internet Infrastructure: The Shape Of Things To Come – Dalibor Vrsalovic, Intel Corp.		
10:00-10:30	REFRESHMENTS IN EXPO HALL EXPO HOURS: 10 - 3:30 p.m.		
12:00-1:30	CONFERENCE LUNCH & NETWORKING IN EXPO HALL		
		Advanced Techniques I	**Software Components**
10:30		6T1 Test Strategies for Embedded Systems – Rainer Stetter, ITQ Gmbh	**6** 6A1 Trials and Tribulations Of Testing a Java/C++ Hybrid Application – Steve Whitchurch, Mentor Graphics Corp.
11:15		6T2 Automating Test Oracles and Decomposability – Keith B. Stobie, BEA Systems, Inc.	6A2 Software Testing in Latvia: Lessons Learned – Juris Borzovs & Martins Gills, Riga Information Technology Inst.
		Java	**COTS**
1:30		7T1 Requirements For A Comprehensive Testing Environment – Don Cohen, Princeton Softech	**7** 7A1 Specification Based Testing Of the UMTS Protocol Stack – Holger Schlingloff & Jan Bredereke, Technologie-Zentrum Informatik
2:15		7T2 The Importance of Data In Functional Testing – James Lyndsay, Workroom Productions	7A2 High Availability Testing – Michael K. Jones, Western International University
3:00-3:30	REFRESHMENTS IN EXPO HALL		
		Advanced Techniques II	**Specifications**
3:30		8T1 Peer-to-Peer Computing: The Future Of Internet Performance Testing – J. D. Brisk, Exodus Communications	**8** 8A1 Increasing The Effectiveness Of Load Testing: Unit-Level Load Testing – Vince Budrovich, ParaSoft Corporation
4:15		8T2 Quantifying Quality Requirements Using Planguage – Erik Simmons, Intel Corporation	8A2 Building Better Software Code: Finding Bugs You Never Knew You Had – Scott Trappe, Reasoning, Inc.
5:00-6:00	**SPECIAL PANEL SESSION**	8P Ask The Quality Experts! – Nick Borelli, Microsoft Corp., Panel Chair (PANEL SESSION)	Post Your Questions on the Web! Stump the Experts If You C QW 2001 Advisory Board Experts Will Answer All! (In Coope

FRIDAY, June 1 - Day 3

Time	PLENARY SESSION	TECHNOLOGY	APPLICATIONS
10:00-10:30	REFRESHMENTS IN EXPO AREA		
10:30-12:30	**10** Plenary Session Introduction: Edward Miller, Software Research, Inc. 10P1 The Need For Speed: Automating Functional Testing – Lisa Crispin, Tensegrent 10P2 Internet Quality of Service (QoS): The State Of The Practice – David Lilly, siteROCK Corp. 10P3 Riding The Wave – The Future For Software Quality – Thomas Drake, Integrated Computer Concepts, Inc AWARDS PRESENTATION to follow		
		UML Methods	**Risk**
8:30		9T1 Creating A Tool-Independent Test Environment – Greg Berger, Lawson Software	**9** 9A1 Evolutionary Testing Of Embedded Systems – Harmen Sthamer & Joachim Wegener, DaimlerChrysler AG
9:15		9T2 The Frost Extreme Testing Framework – Daniel Blezek, Timothy Kelliher, William Lorensen & James Miller, GE Corporate R&D	9A2 The Design and Implementation of a Flexible, Reusable and Maintainable Automation Framework – Hung Q. Nguyen, LogiGear Technology
		BEST PAPER AWARD • BEST PRESENTATION AWARD	
1:00-2:00	CONFERENCE LUNCH		
2:00-5:00	**POST CONFERENCE WORKSHOPS**	W1 Developing The Right Test Documentation – Cem Kaner, Florida Institute of Technology	W2 Automating Software Testing: A Life-Cycle Methodology – John Paul, Minjoh Technology Solutions
	STANDBY PRESENTATIONS	SB1 Test Strategy Derivation – Michael K. Jones, Assistant Professor, WIU SB5 More Reliable Software Faster And Cheaper – An Overview – John D. Musa, Consultant	SB2 Iterative Approach as Basis For Effective Testing – Alexey Kerov, Amphora Quality Technologies SB6 Requirements-Based UML – Joseph D. Schulz , Technology Builders, Inc

INTERNET	MANAGEMENT	QUICKSTART	
2W1 **Quality in A Dotcom Startup – Fact or Fiction?** Adrian Cowderoy, ProfessionalSpirit Ltd	2M1 **A Requirements-Based Approach To Delivering E-Business And Enterprise Applications** Scott Jefferies, Technology Builders, Inc.	2Q **Extreme Programming Explained** Kent Beck, Author	2
2W2 **Innovative Web Test Process & Control Tool** Todd Hsueh, IBM	2M2 **Pre-Defining Success: Incorporating e-Metrics Into Business & Technical Requirements For Web & e-Business Solutions** Robert Benjamin, Ruth Pennoyer & Karen Law, Spherion Corporation		
WebSite Performance I	**Process Feedback**		3
3W1 **Performance Testing Applications In Internet Time** Nancy Landau, Alltel Technology Services	3M1 **Six-Sigma Meets Extreme Programming: Changing the Way We Work** Timothy Kelliher, Daniel Blezek, William Lorensen & James Miller, GE Research & Dev.	3Q **Planguage: A Defined Planguage for Clearer Requirements and Design** Tom Gilb, Result Planning Limited	
3W2 **Modeling The Real World For Load Testing Web Sites** Steve Splaine, Splaine & Associates	3M2 **Investigating The Applicability Of The Taguchi Method To Software Development** Elli Georgiadou, Middlesex University & Naomi Barbor, University of North London		
WebSite Performance II	**Intellectual Property**		4
4W1 **Why Is API Testing Different** Nikhil Nilakantan & Ibrahim K. El-Far, Florida Tech	4M1 **How Testers Can And Should Drive Development Cycles** David Fern, Micros Systems, Inc.	4Q **Establishing a Wireless Telecommunication Test Automation System** Greg Clower, SDT Corporation	
4W2 **Best Practices in Web Performance Testing: "Not Optional Anymore!"** Phil Hollows, RadView Software	4M2 **Managing The Proportion of Testers To Developers** Cem Kaner, Florida Institute of Technology		

7:00 **Baseball at the NEW Pac Bell Park SF Giants vs. Arizona Diamondbacks** SPECIAL EVENT

Internet Time	**Practical Testing**		6
6W1 **How Are You Going To Test All Those Configurations?** Mark Johnson, Cadence Design Systems	6M1 **The Extended Product Quality Model: Dynamic Focussing On Those Quality** Geert Pinxten, I2B	6Q **WebTesting 101** Jeanette Folkes, Modem Media	
6W2 **Estimating Internet Based Projects: A Case Study** Rakesh Agarwal, Santanu Banerjee & Bhaskar Gosh, Infosys Technologies Ltd	6M2 **Using Requirements To Create Release Criteria** Johanna Rothman, The Rothman Consulting Group		
WebSite Quality	**Defect Tracking**		7
7W1 **Adopting A Lifecycle For Developing Web Based Applications** Bhushan Gupta & Steve Rhodes, Hewlett-Packard Co.	7M1 **Walk & Stagger Through Review Process** Michael Ensminger, PAR3 Communications	7Q **High Accountability Exploratory Testing** James Bach, Satisfice Inc.	
7W2 **Rapid SQA: Web Testing At The Speed Of The Internet** Eric Patel, Nokia Home Communications	7M2 **Process Improvement As A Capital Investment** Warren Harrison, David Raffo & John Settle, Portland State University		
Commercial Quality	**Certification**		8
8W1 **Web-Based Application Quality Assurance Testing** James Helm, Univ. of Houston Clear Lake	8M1 **Risky Business – Adding Risk Assessment To The Test Planning Process** Sandy Sweeney, Compuware Corporation	8Q **The Effective SQA Manager: Getting Things Done** Robert A. Sabourin, AmiBug.Com	
8W2 **Exploring, Discovering and Exterminating Bug Clusters In Web Applications** Kim Davis & Robert Sabourin, My Virtual Model Inc.	8M2 **Software Risk Management** Kamesh Pemmaraju, Cigital, Inc.		

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eration with Microsoft Corporation)

Link Checking	**Process Innovations**		9
9W1 **Quality Assurance and the Internet Site - How To Effectively Hit a Moving Target** Patricia D. Humphrey, Neoforma.com	9M1 **Organizational Performance Engineering: Quality Assurance For The 21st Century** Michael J. Hillelsohn, Software Performance Systems	9Q **How Will The Internet Affect Software Quality Practice? (Panel Discussion)** John D. Musa, Consultant PANEL SESSION	
9W2 **Double Byte Compliance Testing** Prashant Lambat & Anuradha Bhide, Neilsoft Ltd.	9M2 **Choosing Potential Improvements – Comparing Approaches** Brian Lawrence, Coyote Valley Software		

W3 **Bug Priority And Severity** Robert A. Sabourin, AmiBug.Com	W4 **Grace Under Pressure: Handline Sticky Situations in Testing** Johanna Rothman, Elizabeth Hendrickson, The Rothman Consulting Group	W
SB3 **Application Lifecycle Management for Containing the Web Crisis** Susan Dart, Pretzel Logic	SB4 **Successful Test Management: 10 Lessons Learned** Johanna Rothman, The Rothman Consulting Group	SB
SB7 **Testing From the Beginning - Use Cases at Work** Jim Heumann, Rational Software	SB8 **Quality Issues, Requirements & Challenges for Multimedia Streaming on the Internet** Kobad Bugwadia & Kris Mohan, Intel Corporation	

THURSDAY, May 31 - Day 2

KEYNOTES

8:30 - 10:00

Plenary Session Introduction
Dr. Edward Miller, Conference Chair

5P1 **Independent Verification And Validation Implementation At NASA**
Dr. Linda Rosenberg, GSFC NASA
- IV&V is a valuable tool for increasing sofware quality and reliability
- IV&V needs selection criteria for which projects should apply it
- NASA is now requiring IV&V evaluation for all projects and application on some

5P2 **Issues in Design and Validation of Modern eBusiness Systems**
Dr. Dalibor Vrsalovic, Intel Corporation
- This talk will discuss modern trends in Internet systems architecture
- How high level system abstractions save could save both time and cost during design, building, validation and operations of eBusiness systems
- Discuss concrete example of a high level system model and its benefits

10:00 - 10:30 & 3:00-3:30
COFFEE BREAKS IN EXPO HALL

QW2001 BIRDS OF A FEATHER SESSIONS

Chaired by Advisory Board Member Mark Wiley. If you are a QW2001 speaker or a QW2001 attendee and you are interested in attending a BOFS on a particular topic, or you would like to chair a BOFS, please contact Mark at: mwiley2@earthlink.net.
Times and schedule to be announced.

SPECIAL PANEL SESSION

5:00 - 6:00
Ask the Quality Experts

Chaired by Nick Borelli, Microsoft

Are you ready to stump the experts? Post your own question on the web for the upcoming panel before coming to the conference. After you've submitted your question, come and join in the fun in person and hear your question answered by the experts.

Panel Members:
Cem Kaner
Bill Howden
Kris Mohan
Elisabeth Hendrickson
Linda Rosenberg

TECHNOLOGY / APPLICATIONS

10:30 - 12:00

Advanced Techniques I

6T1 **Test Strategies for Embedded Systems**
Dr. Rainer Stetter, ITQ Gmbh
- Real life example (control system), project running from 1997 to 2000
- Detailed discussion of every project phase
- Recommendation of approaches, measures and tools

6T2 **Automating Test Oracles and Decomposability**
Mr. Keith B. Stobie, BEA Systems, Inc.
- Patterns for verifying test case results: external vs. internal checking
- Patterns for how to check: external vs internal data (data driven testing)
- Test logging strategies

Software Components

6A1 **Trials and Tribulations Of Testing a Java/C++ Hybrid Application**
Mr. Steve Whitchurch, Mentor Graphics Corp.
- What are the issues testing a C++ / Java Hybrid Application?
- Low tech methods to achieve a high quality product.
- Using Java to test a Java GUI.

6A2 **Software Testing in Latvia: Lessons Learned**
Mr. Juris Borzovs & Mr. Martins Gills, Riga Information Technology Inst.
- Academic research programmes on software testing have led Latvia's IT sector to large scale awareness of testing and quality assurance resulting in adeqate standard development and systematic QA practices at largest IT companies.
- Special role in testing plays the independence of software test team - both inside the project project and as an external assesor.
- Experience of training for testers is shown, pointing to the requirements to select a good team for testing.

1:30 - 3:00

Java

7T1 **Requirements For A Comprehensive Testing Environment**
Mr. Don Cohen, Princeton Softech
- Heightened Testing Need
- Automated Testing
- Creating and Maintaining Test Data

7T2 **The Importance of Data In Functional Testing**
Mr. James Lyndsay, Workroom Productions
- Plan the data for maintenance and flexibility
- Know your data, and make its structure and content transparent
- Use the data to improve understanding throughout testing and the business

COTS

7A1 **Specification Based Testing Of the UMTS Protocol Stack** Dr. Holger Schlingloff & Dr. Jan Bredereke, Technologie-Zentrum Informatik
- Development of flexible testing environment for UMTS protocol stack software
- Black-box testing of parallel real-time systems
- Testing results prove increase in performance/ cost ratio by automated test case generation

7A2 **High Availability Testing** Mr. Michael K. Jones, Western International University
- High availability of computer systems is a necessity for more systems than ever.
- Testing of high availability systems must be defined in terms of software, system, and process.
- Test strategy derivation for high availability systems must be traceable to logical system architecture.

3:30 - 5:00

Advanced Techniques II

8T1 **Peer-to-Peer Computing: The Future Of Internet Performance Testing**
Mr. J. D. Brisk, Exodus Communications
- Web testing: Load/Stress testing
- Peer-to-Peer Computing
- Distributed Computing

8T2 **Quantifying Quality Requirements Using Planguage** Mr. Erik Simmons, Intel Corporation
- Designed to quantify qualitative statements in plans, specifications, and designs,
  - Planguage is a keyword-driven language that allows measurable, testable quality requirements to be written.

  Planguage has many benefits; it is easy to learn, compact, extensible, and provides a consistent way to specify quality requirements.
- Examples and experiences introducing Planguage at Intel are provided.

Specifications

8A1 **Increasing The Effectiveness Of Load Testing: Unit-Level Load Testing**
Mr. Vince Budrovich, ParaSoft Corporation
- Performing load testing early in the development cycle can significantly reduce develop ment costs and prevent great frustration.
- Testing servlets as they are written is an effective way of uncovering scalability problems early on.
- Performing unit level load testing can uncover elusive errors that can get missed during application level testing.

8A2 **Building Better Software Code: Finding Bugs You Never Knew You Had**
Mr. Scott Trappe, Reasoning, Inc.
- Why current software quality control processes are inadequate and often miss fatal defects
- The pros and cons of different source code inspection methodologies
- Implementing automated software inspection as an outsourced service

THURSDAY, May 31 - Day 2

INTERNET | MANAGEMENT | QUICKSTART

10:30 - 12:00

Internet Time

6W1 How Are You Going To Test All Those Configurations?
Mr. Mark Johnson, Cadence Design Systems
- Testing configurations is hard, especially in the web-world
- You can get your configuration testing under control
- It is possible to cover many configurations with limited resources and time

6W2 Estimating Internet Based Projects: A Case Study
Mr. Rakesh Agarwal, Mr. Santanu Banerjee & **Mr.** Bhaskar Gosh, Infosys Technologies Ltd.
- Estimation of Internet projects using Use case point approach
- How to estimate use case points based on technical and non technical factors
- Evolving the weights for all these factors and deriving an estimate based on these

Managing Testing

6M1 The Extended Product Quality Model: Dynamic Focussing On Those Quality
Mr. Geert Pinxten, I2B
- Radical Innovation
- Incremental Innovation
- The Product Life Cycle
- The Product Quality Model
- The Extended Product Quality model

6M2 Using Requirements To Create Release Criteria Ms. Johanna Rothman, The Rothman Consulting Group
- What release criteria are
- How to use release criteria during the project, not just at the end
- How to define release criteria
- Working with the project manager, to make sure the release criteria are used

QUICKSTART

6Q WebTesting 101
Ms. Jeanette Folkes, Modem Media
- How to build a quality assurance department, from people to process
- How to test web applications
- Tips & tricks to speed up the testing and test planning process

6

DOUBLE SESSION

"In my opinion, Quality Week has over the years, acquired the position of worldwide flagship conference for bringing together researchers and practioners in software testing and quality. I really believe it is unique in this achievement."
--Antionia Bertolino (CMR-IEI, Italy)

1:30 - 3:00

WebSite Quality

7W1 Adopting A Lifecycle For Developing Web Based Applications
Mr. Bhushan Gupta & Mr. Steve Rhodes, Hewlett-Packard Co.
- Web Development
- Lifecycle
- Process Improvement

7W2 Rapid SQA: Web Testing At The Speed Of The Internet
Mr. Eric Patel, Nokia Home Communications
- The quality attributes that are important in web testing
- RapidSQA philosophy, goals, and program elements
- Defect management, metrics, and release criteria for web testing

Defect Tracking

7M1 Walk & Stagger Through Review Process
Mr. Michael Ensminger, PAR3 Communications
- Peer Reviews
- Design Reviews
- Process Improvement

7M2 Process Improvement As A Capital Investment
Prof. Warren Harrison, Dr. David Raffo & Dr. John Settle, Portland State University
- Economics of Process Improvement
- Making the Business Case
- Return on Investment

QUICKSTART

7Q High Accountability Exploratory Testing
Mr. James Bach, Satisfice Inc.
- How to have an orderly and defensible test process without pre-scripted test cases.
- How a session protocol can create the basis for a measurable process.
- Using metrics to track exploratory testing.
- How to explain a test strategy, after the fact.

7

DOUBLE SESSION

3:30 - 5:00

Commercial Quality

8W1 Web-Based Application Quality Assurance Testing
Dr. James Helm, Univ. of Houston Clear Lake
- Website Application Testing
- Quality Assurance
- Web Testing

8W2 Exploring, Discovering and Exterminating Bug Clusters In Web Applications
Mr. Kim Davis & Mr. Robert Sabourin, My Virtual Model Inc.
- Areas of uncertainties define bugs clusters having natural affinities of causes
- Bug Clusters are easier to locate and manage than individual bugs
- Root-cause analysis & risk-based bug clusters fixes help to converge faster on e-com sites

Certification

8M1 Risky Business – Adding Risk Assessment To The Test Planning Process
Ms. Sandy Sweeney, Compuware Corporation
- Move away from the 'we did the best we could' dysfunctional model of testing
- When picking and choosing the tests you can pull off in the allotted time - how can you know you are picking the right ones?
- Getting everyone - not just the test group - to understand and be involved in making these tradeoffs

8M2 Software Risk Management
Mr. Kamesh Pemmaraju, Cigital, Inc.
- Companies can prevent disatrous software risk by planning ahead.
- How does software risks impact business goals and what is the cost?
- How should software risks be prioritized and managed?

QUICKSTART

8Q The Effective SQA Manager: Getting Things Done
Mr. Robert A. Sabourin, AmiBug.Com
This interactive tutorial walks you through several down-to-earth practical aspects of running an SQA team.
- SQA Management
- Effective Process
- Process Improvement

8

DOUBLE SESSION

"Quality Week's conference themes focus on proven and practical methods for software quality improvement."
– Bill Deibler (SSQC, USA)

Detailed Presentation Abstracts ONLINE . . . Click on the Paper Titles!

FRIDAY, June 1 - Day 3

KEYNOTES

8:30 - 10:00

10P1 **The Need For Speed: Automating Functional Testing** Ms. Lisa Crispin, Tensegrent

- Why Testing for XP is Different, challenging conventional wisdom
- How to educate yourself in the eXtreme Programming (XP) methodology
- How to automate functional tests quickly and leverage them to save time

10P2 **Internet Quality of Service (QoS): The State Of The Practice**
Mr. David Lilly, siteROCK Corporation

- The Crisis of Quality in the Internet Economy
- The Internet is the arena where ideas and money are exchanged at speeds unimaginable just a decade ago.
- There is an ominous undercurrent as the reliance on the Internet increases

10P3 **Riding The Wave – The Future For Software Quality**
Mr. Thomas Drake, Integrated Computer Concepts, Inc.

- Quality for network centric systems
- Software quality engineering
- Future of quality and testing

TECHNOLOGY

10:30 - 12:00

UML Methods

9T1 **Creating A Tool-Independent Test Environment**
Mr. Greg Berger, Lawson Software

- Discussion of some of the problems and concerns of developing tests using a specific automated test tool.
- How Object Oriented Programming Techniques can minimize the impact of tool specific changes.
- How integrating multiple technologies can create a test environment that makes use of the strengths of 3rd Party automated test tools, yet keeps your test environment and regression tests independent of the test tool.

9T2 **The Frost Extreme Testing Framework**
Dr. Daniel Blezek, Mr. Timothy Kelliher, Mr. William Lorensen & Dr. James Miller
GE Corporate R&D

- The frost software testing framework
- Test result collection
- Test result storage
- Test reporting

APPLICATIONS

Risk

9A1 **Evolutionary Testing Of Embedded Systems**
Dr. Harmen Sthamer & Mr. Joachim Wegener, DaimlerChrysler AG

- Evolutionary Test automates entirely testing
- Test case design is difficult
- Powerful tool environment

9A2 **The Design and Implementation of a Flexible, Reusable and Maintainable Automation Framework**
Mr. Hung Q. Nguyen, LogiGear Technology

- How to design a reusable test automation framework
- How to prepare for the development of an automation project
- Developmemt mistakes to avoid

POST CONFERENCE WORKSHOPS

2:00 - 5:00

Cem Kaner, PhD. consults on technical and management issues and practices law within the software development community. He is Professor of Computer Sciences at the Florida Institute of Technology.

Cem Kaner

John Paul is Founder and President of Minjoh Technology Solutions, Inc. He has a BS degree in Computer Science and 12 years of professional software development experience. He is co-author of "Automated Software Testing."

John Paul

W1 **Developing The Right Test Documentation**
Dr. Cem Kaner, Florida Institute of Technology

- The best approach to project documentation depends on the project context, and not necessarily on published standards.
- These are useful questions for learning your project's requirements for test documentation.
- Context-free questions and lists can guide you in developing good tests and test strategies when you don't have time to develop a full set of documentation.

W2 **Automating Software Testing: A Life-Cycle Methodology**
John Paul, Minjoh Technology Solutions

- This tutorial outlines the Automated Test Life-cycle Methodology, a structured process for designing, developing, executing and managing testing that parallels the System Development Life-cycle.
- Best practices for test automation
- A Case Study will address each phase of the Automated Testing Life-cycle.
- Test tool evaluation and selection

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- Compuware
- eTesting Labs
- eValid
- IEEE
- McCabe & Associates
- Polyspace Technologies
- Princeton Softech
- QualityLogic, Inc.
- Reasoning Systems
- Software Development Technologies
- Software Research
- Software SETT Corp.
- Spherion
- SQE
- TeamShare Inc.
- TesCom
- Test Quest
- TechExcel
- Vanteon
- Veritest
- And more . . .

EXPO HOURS:
Wednesday
10:00 AM - 6:00 PM
Thursday
10:00 AM - 3:30 PM

EXPO RECEPTION
Wednesday , 5:00 - 6:30

Special TOOL DEMOS and addtional VENDOR TECHNICAL PRESENTATIONS
See Schedule published in Expo Guide

INTERNET | MANAGEMENT | QUICKSTART

10:30 - 12:00

Link Checking

9W1 **Quality Assurance and the Internet Site - How To Effectively Hit a Moving Target**
Ms. Patricia D. Humphrey, Neoforma.com
- Rapid Development and Quality Assurance
- Rapid Testing and Delivery of a Quality Product
- Quality Assurance and it's Ally, Change Control

9W2 **Double Byte Compliance Testing**
Mr. Prashant Lambat & Ms. Anuradha Bhide, Neilsoft Ltd.
- Requirements for Double byte testing
- Creating Test Automations
- Pitfalls encountered

Process Innovations

9M1 **Organizational Performance Engineering: Quality Assurance For The 21st Century**
Mr. Michael J. Hillelsohn, Software Performance Systems
- Multi-disciplinary, pro-active Organizational Performance Engineering is the future of quality
- Effective Quality Assurance facilitates the next step in a process instead of waiting to correct
- Fresh approaches to quality assurance are needed to apply sound software engineering principles

9M2 **Choosing Potential Improvements – Comparing Approaches**
Mr. Brian Lawrence, Coyote Valley Software
- What are the advantages and disadvantages of different improvement approaches
- How to analyze the your situation to help choose what you're going to do
- Examples of how others have made improvement strategy choices

9Q **How Will The Internet Affect Software Quality Practice?**
Mr. John D. Musa, Consultant
This special panel session draws on experts who are members of the QW2001 Advisory Board, and from selected QW2001 speakers, to address the critical of how the advance of the Internet will affect future software Quality Practice.

Panel Session

9

POST CONFERENCE WORKSHOPS

2:00 - 5:00

W3 **Bug Priority And Severity**
Mr. Robert A. Sabourin, AmiBug.Com
In this interactive half day tutorial the concepts of defect priority and severity are explored.
- The concept of the four-quadrants of priority and severity are taught
- How business factors influence the quadrant of a bug
- Review of some actual defect arrival graphs from recent commercial product development efforts
- Practical aspects of bug tracking, efect logging and bug review meetings are included.

W4 **Grace Under Pressure: Handline Sticky Situations in Testing**
Ms. Johanna Rothman, Ms. Elizabeth Hendrickson, The Rothman Consulting Group
- How to make sure they heard what you said and not what they wanted you to say.
- How to handle difficult situations and obstinate people.
- What to do when you don't feel like anyone is listening.
- How to say "no" and make it stick.

Johanna Rothman

Johanna Rothman is a speaker, trainer and consultant on managing high technology product development and quality. As a member of the Gordon Institute at Tufts University, and holds two ASQ certifications: Certified Quality Auditor and Certified Software Quality Engineer.

10

Robert Sabourin

Robert Sabourin (rsabourin@amibug.com) is an author, lecturer, and president of AmiBug.Com, a firm specializing in software management consulting, teaching, and professional development. Robert is the author of the popular children's book I am a Bug (ISBN 0-9685774-0-7) which explains what SQA folks really do at work.

More Detailed Presentation Abstracts ONLINE . . . Click on the Paper Titles!

AWARD CEREMONY

We are especially excited about the 30 technical papers and over 80 presentations that will compete in the race for the QW2001 Best Paper Award and the QW2001 Best Presentation Award. The winners will be announced during the Plenary Session on Friday.

Best Paper Award: Among the 30 technical papers, 3 finalists have been selected by the QW2001 Advisory Board. The Best Paper receives the recogniton of the QA community and $1000 in Cash.

Best Presentation Award: This award is given to the most dynamic, charismatic and professional presenter of the QW2001 speaker team. The winner is invited to present the talk at Quality Week Europe 2001 in Brussels, Belgium.

YOU, the QW2001 ATTENDEE must return YOUR VOTE by Friday morning 10:30 am to the Registration Desk.

MEETING OF THE MINDS

Pick the Industry Experts Brains during three special PANEL SESSIONS:

Hot Topic 1: How Do You Test Internet Software?
Brian Lawrence, Coyote Valley Software

Hot Topic 2: Ask the Quality Experts. Nick Borelli, Microsoft will answer your questions posted on the website, before the conference. Members from the Advisory Board will debate with you.

Hot Topic 3: How Will The Internet Affect Software Quality Practice? John D. Musa, Consultant

BIRDS-OF-A-FEATHERS: debate with your peers your topics of interest. Sign up at the conference for special discussion groups

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Here are some samplings of attendee's comments about past Quality Week Conferences:

. . . I need to mention to you how impressed I have been with the thought you have given to promoting the big picture. . . .

. . . Quality Week in San Francisco was a valuable experience. The content of the tracks was kept at a educational level and anything that involved a specific product was very clearly identified. No unpleasant surprises . . .

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