# THE FIFTEENTH INTERNATIONAL
# INTERNET & SOFTWARE
# QUALITY WEEK

**San Francisco ● September 3 - 6, 2002**

Produced by

**SR** Software
Research
Institute

## The Wired World

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

QW2002 aims to face internet and software quality issues directly.

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

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

**www.qualityweek.com**

# PRE-CONFERENCE TUTORIALS

**Tuesday, 3 September, 2002**
Morning Classes: 8:30 - 12:00

**A1 Test Automation: A Context-Driven Approach**
Mr. Douglas Hoffman, Software Quality Methods, LLC &
Mr. Bret Pettichord, Pettichord Consulting LLC
- Analyze your requirements for test automation
- Understand how product architecture affects test automation
- Learn the key elements to test automation architecture
- Learn five approaches for verifying test results

**B1 Web Site Reliability and Scalability**
Mr. Ross Collard, Collard & Company
- Testing availability of Web sites
- Testing scalability
- Robustness and recoverability of Web sites

**C1 Web Testing: A Practical Approach**
Mr. Edward Miller, eValid, Inc.
- WebSite testing imposes new constraints on testing and analysis technology
- Very complex WebSites have extremely high "negative payoff" for failure
- WebSite quality requires both static and dynamic testing, and dynamic testing requires 100% maintenance of session context
- Continual monitoring of WebSite quality appears to be a requirement for a complex WebSite

**D1 Writing Good Requirements - [1]**
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

**E1 Practical Web/e-Commerce Stress Testing - [1]**
Mr. Robert Sabourin, Amibug.com
- Learn how to implement stress testing in all phases of software development
- Learn how to find the weakest part of an application by testing to failure
- Explore tools and techniques required to effectively stress test Web Applications

**F1 Test Management And Organization**
Mr. Rex Black, RBCS, Inc.
- Explain the organizational context of an independent testing team
- Create and explain a cost-of-quality based business case for testing
- Figure out how test efforts should fit into various system lifecycles

**G1 Better Data: Better Testing**
Mr. James Lyndsay, Workroom Productions Ltd.
- Data-driven functional test techniques
- The construction of "Good Data", and how it can help avoid common problems
- Data and communication

**Tuesday, 3 September, 2002**
Afternoon Classes: 1:30 - 5:00

**A2 Test Automation: Survey of Architectures**
Mr. Bret Pettichord, Pettichord Consulting LLC &
Mr. Douglas Hoffman, Software Quality Methods, LLC
- Learn the benefits and risks of developing user interface abstraction libraries
- Understand when to use data-driven, keyword-based or model-based approaches
- Learn about options for automating non-user interfaces
- Learn how focusing on test evaluation can enable high-volume test creation

**B2 Security Testing for Web Sites, Web Applications and Software**
Mr. Hung Q. Nguyen, LogiGear Corporation
- To introduce software security and security testing concepts
- To share strategies and tactics for software security test planning and test design
- To discuss common software security vulnerabilities and how to test for them

**C2 Software Projects: Effective Estimating & Planning Techniques**
Mr. Robert L. Galen, RGalen Consulting Group, LLC
- An in-depth overview, with practice, of the presented techniques
- Skills for how to use collaborative, team based techniques to improve your work estimation
- Not only estimating, but how to use collaboration, team based techniques for planning
- Finally, skills in applying the right parts of the techniques to a variety of project situations

**D2 Writing Good Requirements - [2]**
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

**E2 Practical Web/e-Commerce Stress Testing - [2]**
Mr. Robert Sabourin, Amibug.com
- Learn how to implement stress testing in all phases of software development
- Learn how to find the weakest part of an application by testing to failure
- Explore tools and techniques required to effectively stress test Web Applications

**F2 Managing The Testing Process: Test Estimation**
Mr. Rex Black, RBCS, Inc.
- Analyze risks to system quality to determine what should be tested
- Create an actionable, realistic estimate of the tasks, dependencies, resources and time required
- Adjust the estimated budget and schedule to fit project constraints

**G2 Paradigms Of Black Box Software Testing**
Dr. Cem Kaner, Florida Institute of Technology
- There are several different, effective styles of black box testing
- You can probably improve testing in your company by introducing one new style

# POST CONFERENCE WORKSHOPS

**Friday, 6 September, 2002**
Afternoon Classes: 1:30 - 5:00

**W1 Introduction to Performance on the Internet & Web**
Mr. Eric Siegel, Keynote Systems
- The main factors contributing to performance & availability on the Web & Internet
- Covers relevant Web and Internet protocols (TCP, IP, HTTP, SSL, DNS)
- Covers peering, routing; server-room connectivity; caching; CDNs

**W2 Jump Starting Your Test Automation**
Mr. Hung Nguyen & Mr. Hans Buwalda, LogiGear Corp.
- Implement effective & maintainable tests using Action Based Testing™ approach
- Win and keep the necessary management commitments
- Deal with common technical challenges such as testing Web applications, legacy systems, load testing, and complex multi-platform environments

**W3 Web Performance Testing & Issues**
Dr. Subraya BM, Infosys Technologies Ltd.
- How to prepare for the Performance Testing: Planning phase
- How to conduct Performance Testing: Test Execution phase
- How to analyze the results and identify the bottlenecks: Post-test phase

**W4 Bug Advocacy: Effective Bug Reporting**
Dr. Cem Kaner, Florida Institute of Technology
- Many bugs are not fixed because they weren't reported well enough
- Here are some ideas for making bugs easier to reproduce, or simpler to describe
- Here are some ideas for gaining a better understanding of the severity of a bug

**FULL PROGRAM ONLINE AT:  www.qualityweek.com/qw2002/program.html**

# KEYNOTES

**8:30 - 10:00, Wednesday, 4 September**

### 1G1 Internet Reliability Under Stress
**Mr. Fred Baker, Cisco Systems**
- Internet was designed for reliability through redundancy
- The reliability of the network has come under test recently with virus attacks and worms
- Other factors contributing to decreased reliability: end systems, infrastructure software, database design, control of traffic and bandwidth to name but a few

### 1G2 The Human Side of Risk
**Mr. Erik Simmons, Intel Corporation**
- We must better understand our tendencies and limitations as humans when it comes to assessing risks and estimating their severity and probability
- We must better understand how the way we express a risk influences someone's response to it
- We must better understand how culture, values, corporate history, and similar factors influence risk perception and management

**8:30 - 10:00, Thursday, 5 September**

### 5G1 Science, Computer "Sciences", Mathematics, and Software Development
**Prof. Dick Hamlet, Portland State University**
- What is science?
- The traditional relationship among science, mathematics and engineering.
- Why is software engineering different?
- So what is software, really? & What's to be done?

### 5G2 Achieving Very High Reliability for Ubiquitous Information Technology
**Mr. Robert Binder, Mobile Systems Verification**
- Ubiquitous IT presents new challenges
- Highly automated testing can meet these challenges
- Achieving high reliability is not an exotic luxury

**10:30 - 11:15, Friday, 6 September**

### 10G1 Competitiveness Versus Security
**Mr. Don O'Neill, Center for National Software Studies**
- Participants will be able to reason about the practices and factors driving the competitiveness versus security trade off and assess the leading indicators underlying these factors for their own organization
- While both are essential, it is clear that competitiveness and security travel on separate paths that do crisscross and overlap at certain points. The competitiveness versus security trade off may be tilted towards competitiveness, thereby, exposing the nation's critical software infrastructure to predictable security threats

### 10G2 You Want It When?
**Mr. Gregory Pope, University of California LLNL**
- We seldom get all the test time we need
- Most of us don't know how to negotiate
- Specific proven tactics will get you more time

---

## CONFERENCE PROGRAM

**A Brand New Program in Parallel Tracks, spread over three intensive, hard-working days, covers the broad field of Software & Internet Quality with the latest developments in:**

- **Technology:** From browser-based website testing to SPARTA
- **Applications:** Learn solutions from Intel and Motorola; from researchers and practitioners
- **Internet:** E-commerce experience, Internet Time and Site Performance
- **Process:** Managing Testing, Quality Improvement, Process Innovations
- **QuickStart:** A Crash Course on hot topics
- **Tools and Solutions:** The latest details on new tools, solutions and services by the Conference Exhibitors

---

## QW 2002 Exhibitors and Sponsors

*Exhibitors:*

**eValid, Inc.**
**IEEE**
**LogiGear Corporation**
**McCabe & Associates**
**Recommended Test Labs, Inc.**
**Semantic Designs**
**Software Quality First**
**Software Research, Inc.**
**TeamShare, Inc.**
**TestQuest, Inc.**
**Testing Testing 123, Inc.**
... and more

*Media Sponsors:*

**Software Business**
**Software Development Times**

*Cooperating Organizations:*

**ASQ - American Society for Quality**
**WOW - World Organization of Webmasters**

*For an updated roster of exhibiting companies, please visit our Website:*
www.qualityweek.com/qw2002/exhibitors.phtml

### EXPO HOURS:
**Tuesday:  5:00 PM - 7:00 PM**
**Wednesday:  12:00 PM - 6:30 PM**
**Thursday:  10:00 AM - 3:30 PM**

### DON'T MISS THE TOOLS TRACK PRESENTATIONS.
More details and schedule available on our Website or in the Expo Guide.

*SPECIAL EVENING EVENT*
*Tuesday, 3 September, 5:00 PM - 7:00 PM*
Welcome Reception at the Exhibit Hall

**For Details on Special Events, visit our Website at:  www.qualityweek.com**

---

**FULL PROGRAM DESCRIPTION AT:  www.qualityweek.com/qw2002/program.html**

## Registration

Registration includes all seminar and conference material, morning coffee, lunches, refreshments and invitations to all of the special events. To speed up your check-in at the conference and to secure your spot, please pre-register.

**FEES:** The entire Conference Fee is due upon registration. Please pay by credit card, check, or bank transfer. See registration form for complete payment details.

**SUBSTITUTIONS:** Substitutions are permitted with written notification only.

**CANCELLATION:** Cancellations are permitted with a valid cancellation code only. After 16 August 2002 a 20% cancellation fee will be deducted from the total refund. No refunds will be given for non-attendance of any part of the QW2002 event. No cancellations, refunds or credits may be made after 23 August 2002. Call the registrar at 1 (415) 550-3020 for a code.

**CONFERENCE SITE:** Quality Week will be held at the luxurious San Francisco Marriott, 55 Fourth Street, San Francisco, CA 94103, USA

**HOTELS:** Attendees will receive a special discounted rate at the San Francisco Marriott. Please make reservations early while rooms are still available. See website for details.

---

**PLEASE TYPE OR PRINT**

Name _____

Company _____ Job Title_____

Street _____ City_____

State _____ Zip _____ Country_____

Phone _____ Fax_____

E-Mail _____ Date_____

**PLEASE CHECK ONE**

| | On/Before 04 August | After 04 August |
|---|---|---|
| ❑ FULL EVENT Tutorials, Conference & Workshops (Tue - Fri) | USD$1750 | USD$1850 |
| ❑ Tutorials & Conference (Tue - Fri, AM) | USD$1550 | USD$1650 |
| ❑ Conference Only (Wed - Fri, AM) | USD$1250 | USD$1350 |
| ❑ One Conference Day | USD$650 | USD$700 |
| ❑ Pre-Conference Tutorials (Tue) | USD$550 | USD$600 |

**Group Registration:** Register with your colleagues and save 10% of Conference and combined event rates.
**Membership Discount:** A 10% discount is available to members with a membership identification of any of the following cooperating organizations: ASQ, WOW.
**Academic/Student Discount:** 50% discount is available to academics and students. Proof of status must be provided. (Discounts are not combinable.)

**Please Choose Your Pre-Conference Tutorials:**

Tues AM: ❑ A1 ❑ B1 ❑ C1 ❑ D1 ❑ E1 ❑ F1 ❑ G1
Tues PM: ❑ A2 ❑ B2 ❑ C2 ❑ D2 ❑ E2 ❑ F2 ❑ G2

**Primary Job Function (Choose One):**

| | | |
|---|---|---|
| ❑ Software Testing | ❑ Project Management | **Technology Information:** |
| ❑ Quality Engineering | ❑ Embedded Real-Time | Industry _____ |
| ❑ Analyst | ❑ Web/e-Business Testing | Platforms Used _____ |
| ❑ People & Teams | ❑ Verification | Languages Used _____ |
| ❑ Programming | ❑ Requirements | Purchasing Authority: |
| ❑ Quality Assurance | ❑ Other: _____ | ❑ Research ❑ Specify ❑ Other |
| | | ❑ Recommend ❑ Approve |

**Method of Payment - All fees must be paid before August 31, 2002:**

❑ Amount of Payment _____ Purchase Order # _____

❑ Check Enclosed Payable in US funds to:
   SR Institute - QW2002, 901 Minnesota Street, San Francisco, CA 94107, USA

❑ Credit Card: _____ ❑ VISA ❑ MasterCard ❑ American Express
   Name on Card: _____
   Card Number: _____ Expiration:_____
   Signature: _____

❑ Bank Transfer: _____
❑ **Wells Fargo Bank**, 490 Brannan Street, San Francisco, CA 94107;
   USA ABA Code: 121-000-248; FBO Account #: 0052-078-029, SR Institute. SWIFT Code: WFBIUS6S
❑ **Kredietbank nv**, Geldenaaksebaan 149, -3001 Heverlee, Begium
   Account #422-0037759-88, "Quality Week Account". SWIFT Code: KREDBEBB

**You may also phone, fax or E-mail your registration and payment information to:**
   Voice: [+1] (415) 550-3020  Fax: [+1] (415) 550-3030  or  E-mail: qw@qualityweek.com

---

**Quality Techniques Newsletter Online** ❑ Yes, please add my e-mail address to the free subscripting list for the QTN Online published by Software Research, Inc.

**Addressee gone?** Please re-route to desk of software quality assurance or information systems director.

**SR Software Research, Inc.
901 Minnesota Street
San Francisco, CA 94107 USA**

**REGISTER EARLY ONLINE AT:  www.qualityweek.com/qw2002/register.html**