International Conference on Software Quality
(ICSQ 2007)
Delivering High Performance Through Software

October 16-17, 2007 in Lakewood (Denver), CO
with tutorials October 15, 2007
and post-conference classes October 18-20, 2007

Keynote Speakers:
Ken Schwaber
Richard Turner

Panel Discussion:
Introducing Agile Methods Into Traditional Environments

Invited Speakers:
Jay Arthur
Robin Goldsmith
Timothy Olson
Mark Paulk
Gregory Pope

For ongoing ICSQ 2007 information & updates
visit our website at: www.asq-icsq.org
ICSQ 2007 provides a forum for individuals and organizations seeking technologies, concepts, and techniques to improve the quality of their software products, processes, and services, and looking to enjoy networking and learning opportunities.

ICSQ 2007 is presented by the Software Division of the American Society for Quality (ASQ). ICSQ 2007 features one day of tutorials (Monday) prior to the conference and a two-day conference (Tuesday and Wednesday) highlighting keynote speakers, invited presentations, and technical papers from a variety of industry experts and practitioners. Attendees can also select multi-day post conference classes to augment their learning experience.

Who Should Attend?
- Executives with software responsibility
- Product, system, and software managers
- Software engineers
- Software process engineers
- Senior systems analysts
- Software quality engineers
- Software Testers
- Anyone interested in software development/quality

Why Should YOU Attend?
- Learn proven methods and techniques for software engineering, quality and project management that others are using to achieve software excellence
- Network with your peers to compare successes and challenges
- Increase your productivity by implementing the tools and techniques presented
- Participate in tutorials that will provide you with new skills to enhance your working processes
- Learn about new tools and products provided by exhibitors

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Key presentations and tutorials will cover the following industry topics:
- Low overhead software process improvement
- Understanding and applying agile values and principles
- eXtreme programming: best practices, trade-offs, and variants
- How to define practical software metrics
- Beginner’s software quality toolkit
- Integrating value-added audits and collaborative assessments for software process improvement
- Calculating, CMMI-based ROI: how, what, when, and why

Monday, October 15 - Tutorials *
Tuesday and Wednesday, October 16 & 17 - Conference
Thursday - Saturday, October 18, 19 & 20 - Post-Conference Courses **
* Tutorial fees are only included in some conference fee packages
** Post-Conference Course fees are not included in the conference fee
(see conference registration form on page 15 of this brochure).
ICSQ 2007 Keynote Speakers:

**Ken Schwaber**

*When Will Microsoft Go Out of Business?*

The tradeoff between functionality and quality challenges all product companies. More is needed sooner, but reputation can suffer if quality is inadequate to the need. Or, can more than reputation suffer? Is there a line past which a company’s ability to compete and survive starts to diminish? Does a company have any control over when it crosses this line? Ken Schwaber presents some insights into this dilemma from his recent work with companies adopting Scrum and Agile. The results aren’t encouraging, the consequences appalling, and the alternatives few and difficult.

Ken Schwaber is a co-developer of Scrum, an Agile product/project management process, along with Jeff Sutherland. Ken is a signatory to the Agile Manifesto, and one of the founders of the Agile Alliance and the Scrum Alliance. Ken’s current interests are improving the state of the software development profession so that our customers look forward to seeing us, we look forward to going to work, and our products are of excellent quality.

**Richard Turner**

*A Survival Primer for Process Improvement Explorers*

Adopting CMMI (or any other process improvement initiative) can seem like navigating a jungle full of unknown dangers, pitfalls, and false paths. No matter where you are in your process improvement journey, there are a lot of reasons why you might need some help in making it through tough issues. If you are just starting out, you’ll need to survey the territory, consult maps, talk to other explorers, look into hiring guides, and maybe reconsider whether you really need to take that trip after all.

Richard Turner, co-author of *CMMI Survival Guide: Just Enough Process Improvement*, provides insights into how you can not only survive, but thrive in your process improvement journey. He discusses scouting out what you need to know (or should have known) about your environment and process improvement and looks at the skills and knowledge you need to have through the lens of the US Army Survival Guide.

Dr. Richard Turner, a Fellow at the Systems and Software Consortium, is a respected researcher and consultant with 30 years of international experience in systems, software, and acquisition engineering. Before joining the Consortium in 2005, he was a Research Professor at The George Washington University, where he taught graduate courses and directly supported Department of Defense software and system acquisition improvement activities. He still collaborates with a wide range of research organizations and system developers to transition new software-related technology to defense acquisition programs. Prior to the university, he worked for the Federal Aviation Administration and several engineering firms addressing the needs of defense, intelligence, and other government agencies.


ICSQ 2007 Registration Hours

(subject to change)

- **Sunday, October 14, 2007** ............... 1:00 p.m. to 5:00 p.m.
- **Monday, October 15, 2007** ............... 7:00 a.m. to 5:00 p.m.
- **Tuesday, October 16, 2007** ............... 7:00 a.m. to 7:00 p.m.
- **Wednesday, October 17, 2007** ........... 7:00 a.m. to 1:30 p.m.

Registration for Post Conference Class will be in classrooms.

ICSQ 2007 Panel Discussion:

**Monday 8:15 a.m. - 9:30 a.m.**

Introducing Agile Methods into Traditional Environments

Panel Leader: Scott Duncan
Panelists:
- David Kane (SRA)
- Stephen B. Ornburn (GBC-Group, Inc.)
- David E. Peercy (Sandia National Laboratories)
- Ken Schwaber (Control Chaos)
- Richard Turner (Systems and Software Consortium)

Agile software development methods have been reported to achieve some impressive results, but seemingly in very small projects of low risk and complexity using technologies associated with e-commerce. Many software quality professionals work in environments where this is not the typical software product profile and where “traditional” methods, organizational structures and assessment expectations exist (e.g., regulated and/or safety-critical environments). This session will present experiences of several individuals who have applied agile methods in a variety of “traditional” software project environments.

ICSQ 2007 Conference Committee:

- Granville Jones, IQC, Conference Co-Chair
- Linda Westfall, The Westfall Team, Conference Co-Chair
- Theresa Hunt, Hunt Technology Services Inc., ASQ Software Division, Vice Chair Programs
- Doug Hamilton, Accenture, Technical Program Chair
- Sue Carroll, SAS, Tutorials Chair
- Arnold Miller, Openwave Systems, Secretary
- Stuart Yarost, L3 Communications, Marketing Chair
- Scott Duncan, Accenture, Web-Site Coordinator
- Trudy Howles, Rochester Institute of Technology, Proceedings Chair
- Alan Page, Microsoft, Sponsors and Exhibitors Committee
- Michelle Dovel-Cash, Veridian, Sponsors and Exhibitors Committee
- Sam Domenico, Sponsors and Exhibitors Committee
- Gerry Naugle, Vendor Surveillance Corp., Sponsors and Exhibitor Committee
- Bill Trest, Lockheed Martin, Regional Councilor Coordinator
- Taz Daughtrey, James Madison University, WCSQ’08
- Jennifer Admunssen, ASQ, Community Care Administrator
- Marjorie Maupuy, ASQ, Meeting Planner
- Daren Miller, ASQ, Registration Administrator
Monday, October 15 Tutorials:

Tutorial #01: 8:00 a.m. - 5:00 p.m.
7 Low Overhead Software Process Improvements - Presenter: Robin Goldsmith

Software process improvement doesn’t have to be synonymous with expensive formalized approaches, such as the Software Engineering Institute’s Capability Maturity Model (SEI CMM). This interactive tutorial describes it along with a number of alternative approaches that can provide significant software characterized agile methods as getting extensive bureaucracy or organization-wide cultural change. Exercises enhance learning by allowing participants to practice applying practical techniques to realistic examples.

Robin F. Goldsmith, JD is President of Go Pro Management, Inc. consultancy, which he co-founded in 1982. He works directly with and trains business and systems professionals in improving software development processes through more effective requirements definition, Proactive Testing™, managing outsourcing, project management, and measurement. He was International Vice President of the Association for Systems Management and Executive Editor of the Journal of Systems Management. A frequent speaker at leading conferences, he is the author of the recent Artech House book, Discovering REAL Business Requirements for Software Project Success.

Tutorial #02: 8:00 a.m. - Noon
Understanding and Applying Agile Values and Principles - Presenter: Scott P. Duncan

While many organizations seek to reduce software development costs and cycle time as well as increase the quality of their software, there exists some suspicion regarding the claims of agile methods for doing so. This tutorial presents the agile values and principles as described in the Agile Manifesto, explaining their intentions and actual values regarding processes and tools, documentation, customer relationships, and planning. It also presents the 12 agile principles associated with the Manifesto’s value statements, describing the agile community’s views on communication and feedback, change, work environment, technology, lifecycle models, teamwork, and other ideas important in achieving software development agility. Doing this, attendees through small group workshop interactions then consider what sort of specific practices they see as supported by agile values and principles when applied to project organization and management, requirements development, software design, testing, implementation, and product delivery. The work of the individual groups is combined to see how the agile concepts can be applied to many development organizations. For many, bringing in an entirely new development approach such as eXtreme Programming or Scrum may simply not be possible. This tutorial results in ideas for how agile values and principles can be used more incrementally to make changes to existing development processes and methods. Attendees can then pick and choose those ideas which they believe could reasonably be tried in their development environments to increase agility without upsetting their entire development apple cart.

Scott Duncan has been involved in all facets of internal and commercial software development with business and government organizations since 1972. Since 1992 he has been an internal/external consultant helping software organizations achieve international standard registration and various national software quality capability assessment goals. He is a member of the IEEE-CS, Standards Chair for ASQ’s Software Division, and the Division’s representative to the US SC7 TAG and to the IEEE 52SSEC Executive Committee and Management Board. He is also Working Group Chair of IEEE 90003 (adoption) and of IEEE 1648 on agile methods.

Tutorial #03: 8:00 a.m. - Noon
Beginner’s Toolkit - Presenter: Taz Daughtrey

Many individuals attend this conference as their introduction to the software quality profession. This tutorial is designed to introduce “new professionals” to the resources available in the rest of the conference … and beyond… by providing a framework for considering the software quality discipline. It will feature a personal contact with Software Division volunteer leadership and an overview of the wide range of resources available.

Taz Daughtrey serves as Executive Director of the World Congress for Software Quality. He has taught in the Computer Science Department at James Madison University for the past six years, after a lengthy industry career. A Fellow of the American Society for Quality, Taz was the Founding Editor of the Society’s peer-reviewed journal Software Quality Professional and has helped edit two volumes of Fundamental Concepts for the Software Quality Engineer for Quality Press. He has taught and consulted on a wide range of software assurance and management topics throughout North America, Europe, and Japan.

Tutorial #04: 8:00 a.m. - Noon
Integrating Value-Added Audits and Collaborative Assessments for Software Process Improvements - Presenter: Bill Deibler

While internal and external assessments, called by a variety of names (appraisals, assessments, profiles, evaluations, audits) are elements of many standards and software quality models (such as ISO 9000-3, CMM, and CMMI), they are often viewed as unpleasant have-to’s. In fact, when properly implemented, they can be a valuable tool for software process improvement.

A collaborative based assessment is an approach that integrates auditing with process improvement and employee communications strategies. In a value-added structure, auditors are selected for their software engineering expertise and trained to go beyond compliance. An intended side-effect of this peer-based collaborative approach is the advancement of best practices across organizational and project boundaries. This concept is also embraced in the CMMI’s SCAMPI appraisal method.

Value-added auditors seek objective evidence to trigger change that can prevent problems from occurring and that can improve process effectiveness and efficiency. They represent management’s commitment to quality.

William (Bill) J. Deibler II has an MSc in Computer Science and over 25 years experience in the computer industry, primarily in the areas of software and systems development, software testing, and software quality assurance. Bill has extensive experience in managing and implementing software and ISO 9001-based process improvement in software, hardware, and systems engineering environments. Bill is an SEI Authorized CBA IPI Lead Assessor and SCAMPI Lead Appraiser for CMMI. He has led over 20 SCAMPI CMMI assessments.

Bill is a founding partner of SSQC. Since 1990, SSQC has specialized in supporting organizations in the definition and implementation of Software, Hardware, and Systems Engineering Practices, Software Quality Assurance and Testing, Business Process Reengineering, ISO 9000 Registration and CMM/CMMI implementation.

Tutorial #05: 8:00 a.m. - Noon
Delivering Flawless Tested Software Each Agile Iteration - Presenter: Alex Pukinskis

This tutorial introduces core principles and practices for agile acceptance testing. We’ll talk about automating acceptance tests and also how an effective agile team nails down requirements without detailed written specs. Exercises and real world examples will ensure participants can go back to their teams and move closer to having a “system that always runs” in each short iteration of their agile project.

Alex Pukinskis has helped 30 software teams improve quality and reduce time-to-market using Agile principles and practices. As an agile coach with Rally Software and ThoughtWorks, Alex helped guide small and large teams in ISVs and enterprise IT organizations through the transition from traditional software development to lean and agile. With a background including both development and management, Alex has deep experience with entire software lifecycle. Alex holds a B.A. from the University of Connecticut. He currently works with Rally as a Product Manager.
Tutorial #06: 1:00 p.m. - 5:00 p.m.
Extreme Programming: Best Practices, Tradeoffs, and Variants - Presenter: Mark C. Paulk

Extreme Programming (XP) is the best known and most widely used of the agile methods that are at the forefront of software methodology discussions today. One objective of this tutorial is to present the antecedents of the XP variants and the alternatives that have been developed in other contexts. The tutorial will discuss both possible tailoring and reasons an XP practice might be either poorly implemented or not implemented at all.

Mark is a Senior Systems Scientist at the IT Services Qualification Center at Carnegie Mellon University, where he works on best practices for IT-enabled services. From 1987 to 2002, Mark was with the Software Engineering Institute at Carnegie Mellon, where he led the work on the Capability Maturity Model for Software. Mark’s research interests revolve around high maturity practices, statistical process control, and agile methods. Mark received his PhD in industrial engineering from the University of Pittsburgh. He is a Senior Member of the IEEE, a Senior Member of the ASQ, and an ASQ Certified Software Quality Engineer.

Tutorial #07: 1:00 p.m. - 5:00 p.m.
How to Define Practical Software Metrics - Presenter: Tim Olson

Most organizations struggle with metrics. Some metrics are easy to collect but are not very useful. Other metrics are too expensive to collect. Some organizations collect too many metrics, and then don’t use them effectively.

What is a good metric? What are the vital few metrics? This tutorial will describe “what is a good metric,” and provide a baseline of the vital few software engineering metrics. The Measurement Framework is described that is based upon the popular Goal/Question/Metric (G/Q/M) paradigm, the Juran Quality Trilogy, and the initial core measures recommended by the Software Engineering Institute (SEI). The G/Q/M Paradigm is applied to the goals of planning, control, and improvement and based upon powerful metrics that have a proven track record. In order to illustrate the power of the Measurement Framework, real examples from industry are used. Finally, the Measurement Framework helps to ensure that all metrics are collected (e.g., on a form) and stored (e.g., in a database). There will be hands on exercises, as well as time for questions and answers.

Timothy G. Olson is President of Quality Improvement Consultants, Inc. (QIC). While performing quality consulting, Tim has helped organizations measurably improve quality and productivity, save millions of dollars in costs of poor quality, and has helped numerous organizations reach higher SEI maturity levels. Tim has been formally trained in Crosby, Deming, Juran, ISO, CMM®, and CMMI® quality approaches. He is also a Juran Institute Associate. Tim Olson was a lead-author of a Software Quality Course for the University of Minnesota, and he is currently a senior member of ASQ and a member of IEEE and NDIA.

Tutorial #08: 1:00 p.m. - 5:00 p.m.

Demonstrating the value of CMMI-based improvement efforts is recognized as being a difficult proposition, particularly for less mature organizations with little or no measurement capabilities in place. With resources in scarce supply, CMMI efforts increasingly must be able to show superior value compared to other programs in the organization’s portfolio. In particular, Return on Investment (ROI) must be demonstrated to the organization’s leadership, many of whom don’t know (or need to know) many details about the model or its implementation. They simply care that the effort brings financial value.

This workshop will provide guidance to attendees on the following topics:
- How? How do organizations calculate ROI? How can they do it better?
- What? What information is needed in order to calculate ROI? What information is inappropriate?
- When? When should these ROI calculations be performed? When can you compare ROI results across organizations?
- Why? Why should an organization attempt to calculate the ROI of CMMI-based efforts? Is ROI the right way to show financial value?

Rolf W. Reitzig is the president and founder of cognence, inc. Mr. Reitzig has more than 18 years experience across multiple software engineering disciplines and has helped dozens of Fortune 500 companies improve quality, productivity and project results. cognence is a Software Engineering Institute (SEI) CMMI® partner and Mr. Reitzig is a Resident Affiliate assisting the SEI in communicating the return on investment of CMMI efforts to the software development community. Mr. Reitzig speaks regularly at international conferences, seminars, and user groups sponsored by the SEI as well as software engineering automation tool providers like IBM Rational and Serena. He also coaches senior managers, helping them understand the economics of process improvement and its implications on organizational change. Mr. Reitzig holds a Bachelor’s degree in Computer Science and an MBA in Finance from the University of Colorado.

Tutorial #09: 1/2 Day p.m. Tutorial
Test Design Techniques - Presenter: Louise Tamres

So you’ve received, yet again, another requirements document that’s confusing, incomplete, and ambiguous. And somehow, you have to translate this mess into software designs and test cases. It’s not all that difficult if you know how to model requirements. Louise Tamres describes several test design techniques that pinpoint the key features and their intended behavior. In fact, once you’ve applied these techniques, test cases practically write themselves. These same techniques can also assist developers to identify the key functionality to implement. Now that you’ve defined numerous tests, you’ll apply prioritization strategies to select a meaningful subset of tests.

Louise Tamres has over 24 years experience in software engineering, specializing in software testing and software process improvement. Louise has established software quality initiatives at many companies, including GE Medical Systems, General Motors, Nortel, Electro Scientific Industries, as well as assisting start-up companies with their software quality needs. An enthusiastic speaker, she has taught many courses in software quality principles and methods. She is the founding member of Ann Arbor Software Quality Professionals, a group that meets regularly in southeastern Michigan. Her frequent role in mentoring fledgling testers led to the development of her book Introducing Software Testing published by Addison-Wesley. As part of the ASQ, Louise Tamres is a Certified Software Quality Engineer, a member of the editorial board for Software Quality Professional, and the new Councilor for Region 10. Ms. Tamres received her BS and MS degrees from the University of Michigan.

Software Division Meeting
Monday, October 15, 2007
5:30 p.m. - 6:30 p.m.
Software Division members and others interested in the Software Division are invited to attend!!!
Come learn about the Software Division and meet our division officers, committee chairs, and regional councilors.

ICSQ 2007 - Lakewood (Denver), CO
**Software Requirements Engineering (07336C)**

**Instructor:** TBD

This three-day course is designed to provide a knowledge base and practical skills for anyone interested in implementing or improving Software Requirements Development and Management techniques and practices in their organization. This course starts with an overview of software requirements basics. Students will learn and practice various techniques for identifying stakeholders and for eliciting and analyzing requirements. This course also explores various issues involved in testing the software's nonfunctional requirements and the basics of software regression test analysis and ends with an overview of test planning, risk management, tracking, and control. The emphasis is on techniques that allow students to transition the testing skills learned in this course to their own work environment.

**Learning Outcomes:** Upon successful completion of this course you will be able to:
- Understand the basic concepts of software functional testing
- Design and implement tests for the software’s functional and nonfunctional requirements
- Utilize functional test case design techniques to increase both test effectiveness and efficiency
- Select the appropriate tests to regression test your software after changes have been made
- Plan, track, and control the software functional testing effort

**Software Configuration Management (SCM) basics, the management of SCM, and the functions of different types of SCM libraries.** Students learn to identify software configuration items and baselines. Students explore the use of different levels of risk based configuration control and the role of Configuration Control Boards (CCBs), including performing impact analysis on proposed changes. This course provides an overview of configuration status accounting and how to conduct functional configuration audits, physical configuration audits and in-process SCM audits. This course ends with a discussion of software release management.

**Learning Outcomes:** Upon successful completion of this course you will be able to:
- Understand the basics of software configuration management
- Establish a configuration management infrastructure including libraries and tools
- Implement configuration identification
- Control change to your configuration items and baselines
- Report configuration status and conduct configuration audits
- Manage your software releases

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**Software Functional Testing and Test Management (07335C)**

**Instructor:** Theresa Hunt, CSQE

This three-day course focuses on the practical “how-to” knowledge and skills needed to implement and improve functional software testing techniques, practices, and management. Students learn various techniques for performing functional testing of individual functions, user scenarios and of the operational profile. This course also explores various issues involved in testing the software’s nonfunctional requirements and the basics of software regression test analysis and ends with an overview of test planning, risk management, tracking, and control. The emphasis is on techniques that allow students to transition the testing skills learned in this course to their own work environment.

**Learning Outcomes:** Upon successful completion of this course you will be able to:
- Understand the basic concepts of software functional testing
- Design and implement tests for the software’s functional and nonfunctional requirements
- Utilize functional test case design techniques to increase both test effectiveness and efficiency
- Select the appropriate tests to regression test your software after changes have been made
- Plan, track, and control the software functional testing effort

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**Understanding ISO/IEC 20000-1:2005**

ISO/IEC 20000-1:2005 is the ISO standard for IT service management. It provides an assessment framework and specification for the adoption of an integrated approach to effectively deliver managed IT services to meet business and customer requirements. This intensive one-day course provides students with the necessary understanding of the ISO/IEC 20000-1:2005 requirements. The course also discusses the benefits of implementing an IT service management system and how conformity to ISO/IEC 20000-1:2005 will impact the day-to-day operations of IT personnel and the organization as a whole. Additionally, the course discusses the differences between BS 15000-1:2002 and ISO/IEC 20000-1:2005.

**Learning Objectives:**
- Understand the purpose of ISO/IEC 20000-1:2005
- Understand the role of service management processes
- Understand the individual requirements of ISO/IEC 20000-1:2005 and how they apply to IT service management systems
- Learn basic ISO/IEC 20000-1:2005 implementation steps
- Understand the ISO/IEC 20000-1:2005 certification scheme

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All ASQ course fees include daily continental breakfast, lunch and refreshment breaks and all course materials. For more detailed information about these Post-Conference courses, visit our Web site at: www.asq-icsq.org
ICSQ Sponsor/Exhibitor Opportunities

If you or your organization are interested in:

- Meeting prospective clients
- Gaining access to decision makers
- Obtaining more visibility in your marketplace

Consider becoming a sponsor or exhibitor at the ICSQ 2007.

Depending on your sponsorhip/exhibitor level benefits may include:

- Display table in exhibit area
- Presentation in exhibitor's track
- Your logo on conference tote bags, in On-Site Program, and on conference Web site and CD (with a link to your site)
- Advertising in the Software Quality newsletter
- Insert in conference tote bags
- Sponsorship of conference events
- Complimentary ICSQ 2007 registrations

For more information, visit our Web site at: www.asq-icsq.org

or contact Gerald Naugle, the ICSQ 2007 Sponsor and Exhibit chair at, 303-591-2830 or by e-mail to: gnaugle@earthlink.net

ICSQ 2007 Exhibit Area Hours

Tuesday, October 16  7:00 a.m. - 7:00 p.m.
Wednesday, October 17  7:00 a.m. - 1:30 p.m.
Reception in the exhibit area Tuesday evening  5:30 p.m. to 7:00 p.m.

Hot-Topic Lunch Tables

To facilitate networking, special hot-topic lunch tables will be available on Tuesday and Wednesday.

- Pick a topic and join in the discussion
- Propose a topic and lead your own table
- Network with your peers on topics of common interest

ASQ Certification Exams at ICSQ 2007

The following ASQ certification exams will be offered at ICSQ 2007:

- Certified Software Quality Engineer (CSQE)
- Certified Quality Auditor (CQA)
- Certified Manager of Quality/Organizational Excellence
- Certified Quality Engineer (CQE)
- Six Sigma Black Belt

Applicant deadline: September 7, 2007

Exam Date: Sunday, October 14, 2007, 1:00 p.m. 6:00 p.m. (end times may vary based on exam)

Exam Site: Sheraton Denver West

Visit our Web site at:

www.asq-icsq.org

for more information and/or to register for these special certification examination offerings.

ICSQ 2007 - Lakewood (Denver), CO
### Preliminary program is subject to change

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<td>7:00 a.m. – 8:00 a.m.</td>
<td>Continental Breakfast with Sponsors/Exhibitors</td>
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<td>Today’s Exhibits Open 7:00 a.m. – 7:00 p.m.</td>
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<td>Registration/Bookstore Open 7:00 a.m. – 7:00 p.m.</td>
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<tr>
<td>8:00 a.m. – 8:15 a.m.</td>
<td>Opening Remarks:</td>
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<td>Granville Jones and Linda Westfall, ICSQ’07 Conference co-chairs</td>
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<tr>
<td>8:15 a.m. – 9:30 a.m.</td>
<td>KEYNOTE ADDRESS: Ken Schwaber – When Will Microsoft Go Out of Business?</td>
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<td>9:30 a.m. – 10:00 a.m.</td>
<td>Refreshments and Networking with Sponsors/Exhibitors</td>
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<td><strong>Concurrent Sessions</strong></td>
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<tr>
<td>10:00 a.m. – 11:00 a.m.</td>
<td>Session A1: Computer Science Education: Fitting Software Quality into the Curriculum Trudy Howles</td>
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<td>Session A2: Rapidly Achieving Measurable ROI Using Early Defect Detection Invited Speaker: Timothy Olson</td>
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<td>Session A3: Taking the Plunge: Implementing Session-Based Exploratory Testing Techniques Brenda Lee</td>
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<td>Session A4: Software Quality Assurance and the Road to Process Improvement Patricia Loo</td>
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<td>Session A5: Stakeholder Workshop: A Prerequisite for Good Requirements Elicitation Exhibitor Presentation – The Westfall Team</td>
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<td>11:15 a.m. – 12:15 p.m.</td>
<td>Session B1: Why Software Quality Assurance Practices Become Evil! Invited Speaker: Gregory Pope</td>
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<td>Session B2: Data Quality Measurements in a Hospital Data Warehouse Richard Biehl</td>
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<td>Session B3: Software Testing Insanity Theresa Hunt</td>
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<td>Session B4: Team Management: Cingular Wireless’s (AT&amp;T) Journey to SQA Team Excellence Annemarie Colino</td>
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<td>12:15 p.m. – 1:30 p.m.</td>
<td>Lunch and Networking with Sponsors/Exhibitors Hot-Topic Lunch Table Discussions (Tables Marked)</td>
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<td>1:30 p.m. – 2:30 p.m.</td>
<td>Session C1: Beyond Usability: Improving Software Quality by Closing the “Expectation Gap” Nicole Radziwill</td>
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<td>Session C2: How Managers Get So Stupid Invited Speaker: Robin Goldsmith</td>
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<td>Session C3: Software Test Automation 101 Kenneth White</td>
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<td>Session C4: Outside-In, Ad Hoc Software Quality through Error Analysis Mark Underwood</td>
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<td>Session C5: Driving Quality in Your Software Engineering Process Exhibitor Presentation - Cognence</td>
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<td>2:30 p.m. – 3:00 p.m.</td>
<td>Refreshments and Networking with Sponsors/Exhibitors</td>
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<td>3:00 p.m. – 4:00 p.m.</td>
<td>Session D1: TBD Speaker</td>
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<td>Session D2: Secrets of CMMI for AGILE Organizations Jeff Dalton</td>
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<td>Session D3: Automation Framework for Validating Web Based Applications Santosh Kalaskar</td>
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<td>Session D4: The Evolution of the Continuous Representation for Process Capability Invited Speaker: Mark Paulik</td>
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<td>Session D5: Using Rational’s Unified Process to Achieve CMMI Maturity Level 3 Exhibitor Presentation - Cognence</td>
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<td>4:15 p.m. – 5:30 p.m.</td>
<td>Panel – Title: Introducing Agile Methods into Traditional Environments</td>
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<td>5:30 p.m. – 7:00 p.m.</td>
<td>Reception with Sponsors/Exhibitors</td>
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<td>7:00 a.m. – 8:00 a.m.</td>
<td>Continental Breakfast with Sponsors/Exhibitors</td>
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<td>Today’s Exhibits Open 7:00 a.m. – 1:30 p.m.</td>
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<td>Registration/Bookstore Open 7:00 a.m. – 1:30 p.m.</td>
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<td>8:00 a.m. – 8:15 a.m.</td>
<td>Opening Remarks:</td>
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<td>Granville Jones and Linda Westfall, ICSQ’07 Conference co-chairs</td>
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<td>8:15 a.m. – 9:30 a.m.</td>
<td>KEYNOTE ADDRESS: Richard Turner – A Survival Primer for Process Improvement Explorers</td>
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<td>9:30 a.m. – 10:00 a.m.</td>
<td>Refreshments and Networking with Sponsors/Exhibitors</td>
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<td>10:00 a.m. – 11:00 a.m.</td>
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<td>Session E1: Software Change for GMP Systems</td>
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<td>Session E2: World Challenges for Software Quality: Status Report</td>
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<td>Session E3: Back to the Basics with Performance Testing</td>
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<td>Session E4: The Dirty 30 Process for Six Sigma Software</td>
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<td>Invited Speaker: Jay Arthur</td>
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<td>11:15 a.m. – 12:15 p.m.</td>
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<td>Session F1: Risk-Based Configuration Control – Balancing Flexibility with Stability</td>
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<td>Linda Westfall</td>
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<td>Session F2: World Challenges for Software Quality: Workshop</td>
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<td>WCSQ Thought Leaders (Taz Daughtrey)</td>
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<td>Session F3: Convergent Test Framework for a Changing World</td>
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<td>V. Ramamurthy</td>
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<td>Session F4: A Framework to Compare Software Process Assessment Methods for Small Organizations</td>
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<td>Jean-Marc Desharnais</td>
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<td>Alain Abran</td>
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<td>12:15 p.m. – 1:30 p.m.</td>
<td>Lunch and Networking with Sponsors/Exhibitors</td>
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<td>Hot-Topic Lunch Table Discussions (Tables Marked)</td>
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<td>1:30 p.m. – 2:30 p.m.</td>
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<td>Session G1: Automating the Check-in to Deployment Process with Rational BuildForge</td>
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<td>Exhibitor Presentation - Cognence</td>
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<td>Session G2: ISO 25012 – An International Standard for Data Quality</td>
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<td>Mike Kress</td>
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<td>Session G3: Best Practices in Test Automation</td>
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<td>Marc O’Brien</td>
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<td>Session G4: I’ve Been Asked to Review this Software Specification – Now What Do I Do?</td>
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<td>Karen Bishop-Stone</td>
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<td>2:30 p.m. – 3:00 p.m.</td>
<td>Refreshments and Networking</td>
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<td>3:00 p.m. – 4:00 p.m.</td>
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<td>Session H1: Morale Improvements in Software Development Teams Using the TSP</td>
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<td>Ricardo Garza</td>
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<td>Session H2: Management Commitment to Quality Requires Measures</td>
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<td>John Balza</td>
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<td>Session H3: A Case for Test Generation Approach (FAST)</td>
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<td>Yoval Mazor</td>
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<td>Session H4: There’s More to Software Process Improvement than CMMI</td>
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<td>Ally Gill</td>
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<td>4:00 p.m. – 4:30 p.m.</td>
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Tuesday, October 16 - Concurrent Sessions:

10:00 a.m. - 11:00 a.m.

Session A1: Speaker: Trudy Howles - Computer Science Education: Fitting Software Quality into the Curriculum

The document *Computing Curricula 2001* is the current guideline used for Computer Science education. This document, co-authored by the IEEE Computer Society and the Association of Computing Machinery, details the suggested curriculum for undergraduate computer science majors. However, the document focuses on education and not on software development practices. Many computer science graduates are hired into software development jobs. How can computer science educators identify and close this gap?

Learn how innovative courses and initiatives are used to infuse software quality practices into the computer science education program at the Rochester Institute of Technology in Rochester, New York. It provides a model for other educators, and identifies mentoring and partnering opportunities for businesses to help foster knowledge and growth in this important area.

Session A2: INVITED SPEAKER: Timothy Olson - Rapidly Achieving Measurable ROI Using Early Defect Detection

Measurable return on investment (ROI) usually takes years to achieve. How can organizations achieve measurable ROI faster? Learn how to apply early defect detection processes and achieve measurable ROI within a year. The secret is to use early defect detection to dramatically increase defect removal efficiency (i.e., the total amount of defects identified early in the process). Best practices such as data driven checklists are presented. Measuring ROI using defect dollarization is discussed. Explore best-in-class early defect detection processes (i.e., inspections, walkthroughs, peer reviews) and ROI technical approaches (defect dollarization, cost of poor quality, cost performance index).

Session A3: Speaker: Brenda Lee - Taking the Plunge: Implementing Session-Based Exploratory Testing Techniques

Hear how an independent test team for Sandia National Laboratories used Session-Based Exploratory Testing techniques to conduct the system test of a web-based application that has been deployed for a division of the Department of Energy. It describes:

- How the team achieved management buy-in
- Deviations from 'traditional' Session-Based Exploratory Testing
- Lessons learned
- The future of SBET in their test environment

Session A4: Speaker: Patricia Loo - Software Quality Assurance and the Road to Process Improvement

What is software quality assurance like at a DOE government laboratory? Come, listen and take home examples of artifacts used at the Idaho National Laboratory (INL) for the implementation of Software Quality Assurance. From compliance to process improvement – how do you make the transition? Implementation strategies and tools will be presented that will provide benefit and process improvement initiatives for any size software development shop.

For additional guidance in software management practices, the INL Information Technologies (IT) organization has initiated implementation of a Software Lifecycle Framework. This framework has been integrated within the laboratory-wide management system. A demonstration of the implementation of the Software Lifecycle Framework will be provided.

Lessons learned and best practices are discussed along with possible methods for the successful implementation of a corporate-or-laboratory-wide SQA Program and associated software engineering practices.

Session A5: Exhibitor Presentation: The Westfall Team: Linda Westfall - Stakeholder Workshop: A Prerequisite for Good Requirements Elicitation

Before you can effectively elicit requirements information, you must identify the stakeholders for your software project. Participate in an interactive stakeholder workshop to learn stakeholder identification and participation strategy techniques.

11:15 a.m. - 12:15 p.m.


Gregory Pope explores the challenge of determining the best practices for software development and why the topic usually sparks a lively debate. The premise is that best practices are application specific and are not easily portable from one industry to another. He considers a case study of three different types of software developments and contrasts their differences. Learn how to apply an alternative method to best practices, which is a common set of principles that are turned into appropriate best practices based on project risk.

Session B2: Speaker: Richard Biehl - Data Quality Measurements in a Hospital Data Warehouse

Understand how a range of quality metrics and indicators have been designed into an enterprise data warehouse in an academic medical center setting. Learn how those metrics and indicators provide for a view of data and process quality that can drive error recognition and reduction, organizational performance improvement, and business trending and opportunity identification. Richard Biehl shares the designs and outcomes that have been achieved in the example hospital setting, as well as describing the design process and discussions that were necessary to achieve the design and its implementation. Receive a list of the quality rules that were implemented in this hospital, and consider adapting those rules into your own organizations. No knowledge or experience in data warehousing is required.

Session B3: Speaker: Theresa Hunt - Software Testing Insanity

Rich or poor – companies have the same bugs. The rich ones just spend more money not finding them. Surprisingly, even companies with abundant resources often lack understanding of where their real problems crawl. In this session we’ll expose a list of commonly repeated testing inefficiencies, discuss how to avoid them, and determine which testing approaches are right for your application.

Session B4: Speaker: Annemarie Colino - Team Management: Cingular Wireless’s (AT&T) Journey to SQA Team Excellence

How do you ensure that your Software Quality Assurance team is meeting the same high quality expectations they set for others and providing value to the company? Share the Cingular Wireless (now AT&T) SQA team’s journey to Team Excellence which includes a Six Sigma improvement project, organizational change, automation, regular measurement and feedback, and analysis of the value provided by the SQA team.

Session B5: Exhibitor Presentation: To Be Announced

Join the ICSQ 2007 Sponsors and Exhibitors

Tuesday Evening
5:30 p.m. - 7:00 p.m.

Reception in the Exhibit Area

Food ■ Prizes ■ Networking

Colorado Section’s Joint Meeting
Tuesday, October 16, 2007
7:00 p.m. to 8:00 p.m.
Tuesday, October 16 - Concurrent Sessions: (continued)

1:30 p.m. - 2:30 p.m.

Session C1: Speaker: Nicole Radziwill - Beyond Usability: Improving Software Quality by Closing the "Expectation Gap"

Have you ever been part of a development project where all the requirements were fulfilled, the change control process was effective, the software was on time and close to budget, verification and validation was well organized and successful, usability tests were promising – and yet customers still were not satisfied by the product? This may be a result of the “expectation gap” between the written requirements, the assumed requirements, and the ever-increasing consumer expectations for quality in the 21st century. Where does this gap come from, and how can software quality professionals effectively address it? Theory and findings from human factors, ergonomics, and design science (an emerging focus area for software intensive systems development) can help us understand and shrink this expectation gap, improving the perceived quality of the software that we produce. Examples are provided from Nicole Radziwill’s experience managing development in the complex software environment of giant telescopes.

Session C2: INVITED SPEAKER: Robin Goldsmith - How Managers Get So Stupid

My bosses are idiots, unable to tell their proverbial aperture from their proverbial appendage. You probably know from whence I speak. Whether doomed projects from the start with unrealistic budgets and schedules, failing to allow people to use the superior concepts and techniques the organization has paid big bucks for them to learn, or pushing projects into production before they’re ready, boneheaded bosses aren’t just to be laughed at in “Dilbert.” In this attention-grabbing presentation, Robin Goldsmith (who is his own boss and still works for an idiot sometimes) explains how bosses become the way they are.

Session C3: Speaker: Kenneth White - Software Test Automation 101

What do the following three things have in common: Bigfoot, the Loch Ness Monster, and Automated Software Testing? Answer: Everyone has heard of them, but no one actually has any proof they exist. And at least there are pictures of the first two.

Nearly every company that writes software has, at one time or another, flirted with the idea of using automation to test their software. Many of these projects end in failure however, because the company jumps in head first not knowing what to expect or worse, expecting the wrong thing.

So the first step to doing test automation right is setting ground rules, and that is what Kenneth White proposes to do. The intent is to help the attendee answer the question: Just what am I getting myself into? The author has done test automation over the course of his career with half a dozen different tools and has noticed many common themes. The reader can find these tools via a simple web engine search, so the author will not focus on any particular tool or make tool recommendations. Rather, the intent is to focus on broader concepts that apply universally, regardless of the tool specifics.

Session C4: Speaker: Mark Underwood - Outside-In, Ad Hoc Software Quality through Error Analysis

Consider this genuine error message from Google’s RSS reader: “Oops! That wasn’t supposed to happen.” A quality engineer might choose one of two paths. The traditional path focuses on avoiding the error condition altogether. Top down and life cycle techniques to enhance software quality can achieve excellent results, but they are often not utilized. The other path focuses on productive uses for the error condition itself, which is the focus of this analysis. For such situations, a novel outside-in, bottom-up approach is suggested which exploits external error reports and uses them as quality probes to improve code quality. Drawing upon numerous representative error reports from public and private web sites, desktop and open source software, a general method is suggested that can benefit even the smallest teams. Implications for UML and design patterns are identified.

Session C5: Exhibitor Presentation: Cognence - Driving Quality in Your Software Engineering Process Using IBM Rational’s Integrated Suite of Tools - It is widely recognized that automation is a highly effective mechanism to significantly improve engineering processes, product quality, and standardization across projects. Many people use the term “software factory”, but how many really know what one is or looks like? This tutorial describes the make-up of a software factory, the importance of people, processes, and tools, and how IBM Rational’s suite of integrated automation tools help to link these together to create a bona-fide software factory.

Session D1: Speaker: To Be Announced

Session D2: Speaker: Jeff Dalton - Secrets of CMMI for AGILE Organizations

As the CMMI gains popularity and acceptance across the globe, many agile IT and Engineering organizations feel that the CMMI is not a fit for them and that the SEI has left them out. Not only do they want to leverage a best-practices model for process improvement, but many of their customers are asking them to reach CMMI Maturity Level 3 or even level three!

Some think the CMMI is a heavy, burdensome process model only meant for large scale software development in the defense, aerospace, and pharmaceutical industries. It just isn’t so! The CMMI is a valuable tool for helping small and large organization’s alike achieve a superior level of performance through greater efficiency, less rework and all-around higher quality.

Join Lead Appraiser, author, and consultant Jeff Dalton as he reveals the secrets of CMMI appraisals by taking you behind the scenes using actual appraisal data and client case studies.

Session D3: Speaker: Santosh Kalaskar - Automation Framework for Validating Web Based Applications

Learn how the proposed automation framework can be used to validate web applications which need flexible and scalable automation solutions. This framework dwells in detail on the syntax and semantics which can be easily customized to fulfill most of the automation needs. Using this framework in a multi-layered automation architecture simplifies things to such an extent that the automation can be driven through with a single script residing in any one layer. For an easy reference an empirical case study has been provided with full details of the implementation.

Session D4: INVITED SPEAKER: Mark Paulk - The Evolution of the Continuous Representation for Process Capability

A continuous representation model characterizes a set of processes by a structured set of process attributes, typically organized into six Capability Levels. The continuous representation is a flexible and easily extended architecture, so understanding its evolution can be helpful to those wishing to use a continuous representation model or to adapt it for different environments. The capability dimension in the reference model in ISO/IEC 15504, and the variants developed for the Systems Engineering Capability Maturity Model (SE-CMM), the Software CMM, and CMM Integration (CMMI), capture a tradeoff between reliability and usability that remains a challenge for model developers today.

Session D5: Exhibitor Presentation: Cognence - Using the Rational Unified Process to Achieve CMMI Maturity Level 3 – The Rational Unified Process is the most widely used commercial software engineering process available. RUP was developed to help organizations establish standardized best practices that can be tailored and deployed into software projects, helping to achieve standardization, repeatability, and most importantly, better software. Sounds familiar? These are the same objectives of the Capability Maturity Model Integration (CMMI). In this session, learn how RUP satisfies the majority of the CMMI’s requirements at maturity level 3, helping organizations produce more software better and faster.
Wednesday, October 17 - Concurrent Sessions:

10:00 a.m. - 11:00 a.m.

**Session E1:** Speaker: Roneil Narciso - Software Change for GMP Systems

Roneil Narciso steps through the different phases of a change control process for use in an FDA regulated environment and provide key requirements/functionality in selecting a tool to help facilitate the process. Watch a demonstration and gain a better understanding of certain steps that are necessary to ensure changes are implemented in a controlled fashion.

**Session E2:** Facilitator: Taz Daughtrey - WCSQ Thought Leaders World Challenges for Software Quality: Status Report

Leading practitioners have begun a process of defining “World Challenges for Software Quality,” which will be the basis for a major international campaign of research and collaboration. Participating thought leaders will share their progress to date and describe how these challenges will be highlighted at conferences of the World Congress for Software Quality in 2008 and 2011.

**Session E3:** Speaker: Danielle Pugh - Back to the Basics with Performance Testing

As we move into the culture of acquisitions and mergers, how do you define your quality process? Are we able to accommodate the increase in workload without increasing the manpower? At Chase we believe that every project should follow the same basic process, regardless of scope or priority. By educating our project managers on this process, we seamlessly integrate into their project plans to meet business deliverables and deadlines.

Danielle Pugh will walk you through the project life cycle, via a performance tester’s perspective. Process, traceability, templates, accountability, and other mechanisms to make sure that our customers receive a quality testing experience, every time.

**Session E4:** INVITED SPEAKER: Jay Arthur - The Dirty 30 Process for Six Sigma Software

While most software quality efforts focus on requirements, design, code and test, this method focuses on fine tuning delivered software. Yes, it would be better to prevent the kind of problems we see in software, but applications continue to be written by people using requirements and designs than can be flawed. Software is rarely released, it escapes. IT managers and application users often expect a new software project or enhancement release of an application to be flawless, and then are stunned by the additional staffing required to stem the tide of rejected transactions.

The secret is to:

1. Quantify the cost of correcting these rejected transactions
2. Understand the Pareto pattern of rejected transactions
3. Analyze 30 rejected transactions one by one to determine the root cause
4. Revise the requirements and modify the system to prevent the problem

11:15 a.m. - 12:15 p.m.

**Session F1:** Speaker: Linda Westfall - Risk-Based Configuration Control - Balancing Flexibility with Stability

Explore the concepts of risk-based software configuration control. Linda Westfall identifies analysis factors you can utilize when determining the level of configuration control that is appropriate for your programs/projects. You will learn techniques that you can use to help your programs/projects maintain the necessary balance between flexibility and stability in your software configuration control practices, as software moves through the life cycle. These techniques include:

1. Selecting the appropriate type and level of control for each software artifact
2. Selecting the right acquisition point for each configuration item
3. Utilizing multiple-levels of formal control authority

**Session F2:** Facilitator: Taz Daughtrey - WCSQ Thought Leaders - World Challenges for Software Quality: Workshop

Leading practitioners have begun a process of defining “World Challenges for Software Quality,” which will be the basis for a major international campaign of research and collaboration. This session will invite those in attendance at the conference to provide their own responses to the proposed topics. These insights will be incorporated into planning for the World Congress for Software Quality conference in 2008, and participants will be invited to join in its ongoing development.

**Session F3:** Speaker: V. Ramamurthy - Convergent Test Framework for a Changing World

It is common issue that changes in the software specification affect test automation during the every stage of software evaluation. The most distressing element in such an environment is the scripts that are needed to do enormous changes, which doubtlessly, is a tiresome task requiring a huge amount of effort. Hence the test automation architect has to propose appropriate framework(s) that can drive the functional testing of the application under test (AUT) in a faster and more efficient way. With the appropriate framework, any changes in the software functionality, like menu changes, can be handled quickly with the minimal chances in the test suites scripts. This allows scripts to be executed as part of the AUT test procedure with minimal chances.

**Session F4:** Speaker: Mohanned Zarour, Dr. Jean-Marc Deshamais and Dr. Alain Abran - A Framework to Compare Software Process Assessment Methods for Small Organizations

Learn about a proposed framework to compare software process assessment (SPA) methods dedicated to small and very small organizations through a set of characteristics. These characteristics provide the users of this framework with useful and informative data about the compared SPA methods. Such comparisons are useful for both designers of new assessment methods and users (organizations) that want to start an improvement initiative and need to decide which method to use in assessing the current organization’s processes. The proposed framework is applied to seven SPA methods dedicated for small and very small organizations.

Mark Your Calendars for the World Congress for Software Quality (WCSQ)

September 15-18, 2008 Bethesda, MD (Washington DC area)

For more information, watch our Web site at:
http://www.asq.org/software/conferences
Wednesday, October 17 - Concurrent Sessions: (continued)

1:30 p.m. - 2:30 p.m.

Session G1: Exhibitor Presentation: Cognence - Automating the Check-in to Deployment Process with Rational BuildForge - In many software organizations, the process between code check-in and deployment is an arduous, manual set of tasks that are error-prone and inefficient. Learn how key aspects of the CMMI's Product Integration process area are automated for software projects via Rational's BuildForge, while simultaneously establishing an organizational standard framework and repository for building software. In addition, a case study demonstrating a 3x improvement in software build throughput and quality will be discussed.

Session G2: Speaker: Mike Kress - ISO 25012: An International Standard For Data Quality
Managing and enhancing the quality of data is essential in today's interoperable world. The quality of data from computer systems from various organizations, agencies, institutions that are dependent on the data is often unplanned and therefore unknown. There is a need for homogenous criteria for definitions, classifications, authorization, and cancellation procedures. The purpose of the ISO 25012 international standard is to prompt creators of large and small scale data bases to observe predefined criteria, which will enable them to evaluate the quality of data, plot the integrated and interrelated data bases, reduce ambiguity, avoid redundancy, promote ease of data maintenance, and promote reliable, secure data bases. High quality data serve authorized end-users, and facilitate the migration among computer systems when different data bases are merged.

Mike Kress explains the evolution of ISO 25012, how data differs from software in its creation and maintenance and how data undergoes different processes of appraisal, cleansing, matching, transformation, and finally, archiving for display on the dashboards of the users.

Session G3: Speaker: Marc O'Brien - Best Practices in Test Automation
Advanced design and programming techniques in test automation enable the development of a large amount of high quality, and maintainable test code. Get new ideas for improving your test automation practices from Marc O'Brien as he shares techniques and lessons learned from over 12 years of experience doing test automation.

Session G4: Speaker: Karen Bishop-Stone - I've Been Asked to Review this Software Specification - Now What Do I Do?
Errors found during system level testing can be as much as 90 times more expensive to correct than when uncovered during the document creation process. Studies have shown that effective document reviews at the requirements, analysis, and design phases of the software development life cycle uncover as many as 80% of the defects within the system. The evidence speaks to the effectiveness of the outcomes but few software professionals are trained in actual techniques and methods for performing the task of reviewing a document. Learn to apply review preparation techniques and document analysis methods that will improve your reviews.

For more detailed information about these Concurrent Session Topics, visit our Web site at:

www.asq-icsq.org

Receive a $100 discount off your 2-day conference registration by submitting a 250-1,000 word position paper. Submissions will be considered for Hot-Topic Lunch tables. Paper must be submitted prior to registration and before September 21, 2007. For more detailed information on submitting a position paper, visit our Web site at:

www.asq-icsq.org

3:00 p.m. - 4:00 p.m.

Session H1: Speaker: Ricardo Garza - Morale Improvements in Software Development Teams Using the TSP
A common myth in the software arena is that highly disciplined processes go against the team morale. This presentation shows hard evidence against this assumption. Knowledge workers cannot be effectively managed in the same way as traditional more labor intensive teams; in fact they should manage themselves. In order to be effective, they should be able make commitments within their team and with management, to become cohesive and act toward a common goal. Their ability to be successful is highly dependent on their internal morale. The presented data compares software development teams two highly mature processes, a CMMI Level 5 Organization and the Team Software Process (TSP) implemented in the same organization: Softtek Near Shore Services. The data shows that TSP morale results are even better than CMMI level five's.

Session H2: Speaker: John Balza - Management Commitment to Quality Requires Measures
In 1998, Hewlett-Packard began a program for its UNIX software to reduce the number of customer-found defects by a factor of 10 over five years. True to the literature, we found that strong management commitment to quality was a key to any improvement. Engineers and managers, however, were only being measured on delivering functionality on schedule. In order to change the culture, we had to demonstrate to our software development teams that management valued quality over functionality while maintaining schedule. A key enabler was providing management with ways to measure quality as easily as schedule. Learn how our company put in place measures that allowed us to determine our quality at all points in the life cycle and thus achieve “functionality with quality on schedule”.

Session H3: Speaker: Yoval Mazor - A Case for Test Generation Approach (FAST)
The computational power of modern day computers has increased dramatically, making test generation solutions attractive. Traditional test automation approaches rely on handcrafting test scenarios, which makes test development a time consuming process. FAST is a technique that enables automation of the test authoring process, which frees up valuable time for testers to focus on more complex test problems, such as integration testing and end-to-end testing.

Session H4: Speaker: Ally Gill - There's More to Software Process Improvement than CMMI
We often see organizational goals similar to “achievement CMMI Maturity Level 3 within 18 months”. Sadly, this is the antithesis of the real focus of Software Process Improvement, as it fails to address the fact that an organization should undertake such a program in order to realize a genuine business improvement such as greater operational efficiency; higher quality of deliverables, or faster time to market – in other words, improvements that will result in a financial benefit to the business. Whilst the CMMI is a powerful and useful tool, it needs to be used in the correct context, ideally as part of a software process management toolkit which may include other models and standards such as SPICE, ISO 9000, and Six Sigma. Learn how to harness synergies between these tools and how to use them to realize true benefits and return on investment from a Software Process Improvement program.

In Memorial

Mary E. Frisch was our original volunteer to chair the International Conference on Software Quality 2007. She had been an enthusiastic volunteer for both ASQ and the Software Division and was a great help to us on several past conference committees. However, Mary passed away on October 2, 2006. Her cheerful disposition and her seemingly unbounded energy is greatly missed by those who knew her. Mary, we dedicate this conference to your memory.
**HOTEL:**
Sheraton Denver West
360 Union Boulevard
Lakewood, CO
Phone: 303-987-2000
Fax: 303-989-0263

**RATES:** $119.00 single/double occupancy (add $10.00 for each additional person) plus 10.6% state and local sales taxes per room, per night (subject to change). Reservations will be accepted with a first nights deposit (including tax). NOTE: No additional fees or service charges are to be added to the above rate. In the event that you are charged for additional fees/service charges (other than early check out charges), please contact an ASQ staff member on-site prior to hotel check out to assist you.

**RESERVATIONS MUST BE MADE BY Friday, September 21, 2007,** to qualify for this block room rate. Please identify yourself as an attendee of the ASQ ICSQ07 or on-line refer to Group Code ASJ12A at the special web site: [http://www.starwoodmeeting.com/StarGroupsWeb?res?id=0611301459&key=A5449](http://www.starwoodmeeting.com/StarGroupsWeb?res?id=0611301459&key=A5449)

NOTE: the above Group Code will not work on the Starwood or Sheraton web sites.

Check-in: 3:00 pm check-out: 1:00 p.m.

**CANCELLATION:** reservations must be cancelled 72 hours prior to the day of arrival in order to avoid a cancellation fee of one night.

**EXTENDED DATES:** The above hotel rate is good two (2) days pre-and post-conference, based on availability.

**HOTEL RATE AVAILABILITY:** The above rate is guaranteed until either 1) the contracted block of rooms has been filled or, 2) if reservations are made before Friday, September 21, 2007, whichever occurs first.

**INTERNET RESERVATIONS:** Please note that when making hotel reservations with internet booking companies, all reservations must be prepaid and are non-refundable. Further, ASQ and the Sheraton Denver West cannot assist in changing rates and/or gaining refunds.

**LOCATION:** Approximately 31 miles from the Denver International Airport and eight miles from downtown Denver.

**AIRPORT TRANSPORTATION:** SuperShuttle is offering a discount to all attendees of the ICSQ 07. Go to their web site and the online discount code for pre-payment on line at www.supershuttle.com is 4EWTW. Roundtrip fare is $50.00 per person, a savings of $8.00. There is also a link to the coupon: [http://www.supershuttle.com/Coupons/DIA/SoftwareQual.pdf](http://www.supershuttle.com/Coupons/DIA/SoftwareQual.pdf)

**LOCAL ATTRACTIONS:**
- Colorado Mills Mall (2.0 mi/3.2 km)
- Heritage Square (3.0 mi/4.8 km)
- Colorado School of Mines (4.0 mi/6.4 km)
- Applewood Public Golf Course (5.0 mi/8.1 km)
- Denver Convention Center (6.0 mi/9.7 km)
- Six Flags Elitch Gardens Amusement Park (7.0 mi/11.3 km)
- Invesco Field (7.0 mi/11.3 km)
- Downtown Denver (8.0 mi/12.9 km)
- Pepsi Center (8.0 mi/12.9 km)
- Coors Field (8.0 mi/12.9 km)
- Red Rocks Amphitheater (8.0 mi/12.9 km)
- University of Denver (9.0 mi/14.5 km)
- Buffalo Bill's Grave and Museum (9.0 mi/14.5 km)
- Rocky Mountain Foothills (15.0 mi/24.1 km)
- Rocky Mountain National Park (65 mi/71 km)
- Central City / Black Hawk Gambling (28.0 mi/45.1 km)
- Idaho Springs (Natural Hot Springs) (28.0 mi/45.1 km)
- Loveland Ski Area (45.0 mi/72.4 km)
- Keystone Resorts (50.0 mi/80.5 km)
- Winter Park Ski Resort (67.0 mi/107.8 km)
- Breckenridge Ski Resort (74.0 mi/119.1 km)
- Copper Mountain Ski Resort (76.0 mi/122.3 km)
- Vail Ski Resort (84.0 mi/135.2 km)

**SPECIAL NEEDS:** Do you have special needs or dietary restrictions that we can address to make your experience more enjoyable? Please call, write, or fax ASQ’s Event Management Work Group at P.O. Box 3005, Milwaukee, WI 53201-3005, phone 800-248-1946 or 414-272-8575, fax 414-272-1734 or e-mail dmiller@asq.org.

**OUR GUARANTEE:** Your satisfaction is our goal. If you are not completely satisfied with the content of the International Conference on Software Quality 2007, we will gladly apply your conference fees to a future ASQ event. Requests must be received by October 31, 2007. Your feedback is valuable and essential to the continued improvement of ASQ’s programs. If you have questions or concerns, please call ASQ at 800-248-1946 or 414-272-8575 and ask for the Event Management Work Group.

**SUBSTITUTIONS OR CANCELLATIONS:** We understand that occasionally things happen that prevent you from attending an event for which you have registered. If you find that you cannot attend the International Conference on Software Quality 2007, here’s what you can do:

1. Send a substitute. Substitutions can be made at any time—even on site at the conference.
2. Transfer your conference fee to another ASQ conference or course of your choice.
3. Cancellations can be made any time prior to the start of the conference.

*Note: Requests for cancellations and conference fee transfers received on or before September 18, 2007, will receive a full refund/transfer. Requests received between September 19 and October 15, 2007, will incur a $100 processing fee. No requests will be accepted after October 16, 2007. To arrange for any changes, simply call ASQ at 800-248-1946 or 414-272-8575, or mail/fax your request to ASQ, Event Management Work Group, P.O. Box 3005, Milwaukee, WI 53201-3005, fax 414-272-1734. Note: Registrants who fail to attend are responsible for the entire conference fee.

ASQ reserves the right to cancel or reschedule any event, course/tutorial and to change speakers. Please be advised that neither ASQ nor the Software Division are responsible for any airfare penalties or other travel charges you may incur.

**RECERTIFICATION UNITS:** Attendees receive 0.1 RU (recertification unit) credits per hour of attendance. Attendee’s registration acknowledgment or name badge and the on-site brochure provide adequate documentation for ASQ recertification.

**PHOTOS:** The Rocky Mountain views on pages 8-9 are are courtesy of Linda Westfall. All other photos are courtesy of the Denver Metro Convention and Visitors Bureau.

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**4 Easy Ways to Register for ICSQ 2007**

- Fill out the registration form and mail to:
  - ASQ Event Management
  - P.O. Box 3005
  - Milwaukee, WI 53201-3005
- Call ASQ at 800-248-1946 or 414-272-8575 and use your MC, VISA, or AMEX card. To speed your registration process we recommend that you fill out the registration form before calling. Please provide your priority code when calling. (Priority code is located above your name on the mail label.)
- Fax your completed registration form with payment information to ASQ Event Management/CSC, 414-272-1734.
- Complete the online registration form on the ICSQ Web site at [www.asq-icsq.org](http://www.asq-icsq.org)
International Conference on Software Quality 2007 Registration Form

ICSQ 2007 Conference Pricing/Fees:

<table>
<thead>
<tr>
<th>ASQ/SW Division Member</th>
<th>Non-Member</th>
<th>Early Bird*</th>
<th>Position Paper**</th>
<th>Group Discount***</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conference &amp; Full Day Tutorial (or Two ½ Days)</td>
<td>$1,295</td>
<td>$1495</td>
<td>$100 off</td>
<td>$100 off</td>
</tr>
<tr>
<td>Conference Only – Tuesday/ Wednesday</td>
<td>$845</td>
<td>$995</td>
<td>$100 off</td>
<td>$100 off</td>
</tr>
<tr>
<td>Full Day Tutorial (or Two ½ Days)</td>
<td>$495</td>
<td>$595</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>½ Day Tutorial</td>
<td>$295</td>
<td>$395</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>

* Early Bird: Registration must be received by ASQ by September 7, 2007
** Position Paper: Paper must be submitted prior to registration and before September 21, 2007. For more detailed information on submitting a position paper, visit our Web site: www.asq.org/conferences/software-icsq-2007
*** Group Discount: Three or more people registering from the same company or organization

Important! Please write the priority code located above your name on the mailing label in the boxes at the left.

Please print clearly! Mr. Mrs. Ms. Dr. (circle one)

Please do not include my e-mail addresses with the contact information provided to the ICSQ 2007 sponsors/exhibitors.

Conference Session Selection: Please check your preferred sessions so that we can best assign session rooms. You are not bound by these choices.

Tuesday, October 16, 2007
10:00 a.m. - 11:00 a.m. □ A1 □ A2 □ A3 □ A4 □ A5
11:15 a.m. - 12:15 p.m. □ B1 □ B2 □ B3 □ B4 □ B5
1:30 p.m. - 2:30 p.m. □ C1 □ C2 □ C3 □ C4 □ C5
3:00 p.m. - 4:00 p.m. □ D1 □ D2 □ D3 □ D4 □ D5

Wednesday, October 17, 2007
10:00 a.m. - 11:00 a.m. □ E1 □ E2 □ E3 □ E4
11:15 a.m. - 12:15 p.m. □ F1 □ F2 □ F3 □ F4
1:30 p.m. - 2:30 p.m. □ G1 □ G2 □ G3 □ G4
3:00 p.m. - 4:00 p.m. □ H1 □ H2 □ H3 □ H4

Tutorial Registration Monday, October 15, 2007
Select one full-day tutorial: 8:00 a.m. - 5:00 p.m.
□ 01: 7 Low Overhead Software Process Improvements
Or select one or two half-day tutorials as appropriate.
Morning: 8:00 a.m. - Noon (please select only one)
□ 02: Understanding and Applying Agile Values and Principles
□ 03: Beginner's Toolkit
□ 04: Integrating Value-Added Audits and Collaborative Assessments for Software Process Improvements
□ 05: Delivering Flawless Tested Software Each Agile Iteration
Afternoon 1:00 p.m. - 5:00 p.m. (please select only one)
□ 06: Extreme Programming: Best Practices, Tradeoffs, and Variants
□ 07: How to Define Practical Software Metrics
□ 08: Calculating CMMI™-Based ROI: How, What, When, and Why?
□ 09: Test Design Techniques

Post-Conference Course Registration:
Understanding ISO/IEC 20000-1:2005
October 18 (1-day)
□ $495
Software Configuration Management (07337C) October 18-19 (2-day)
□ $1,120 Members
□ $1,250 Nonmembers
Software Functional Testing and Test Management (07335C) October 18-20 (3-day)
□ $1,175 Members
□ $1,470 Nonmembers
Software Requirements Engineering (07336C) October 18-20 (3-day)
□ $1,175 Members
□ $1,470 Nonmembers

Grand Total: ____________

Payment Information: Advance registration must be accompanied by payment in full (U.S. currency) for all desired activities. Purchase orders will be accepted but must be sent along with your completed registration form. All phone registrations or faxes MUST include the number of a major credit card that will be charged for the registration fees (MC/VISA/AMEX accepted). Do not follow up phone, fax, or online registrations with a mail-in registration. All registrations (whether phoned, faxed, mailed, or completed online) will be confirmed by mail with a receipt and confirmation letter.

P.O. number ____________ Check enclosed ____________ Check number ____________

Please charge my credit card □ MC □ VISA □AMEX

Credit card number ____________
Expiration date ____________
Signature ____________
Name of cardholder (please print) ____________

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ICSQ 2007 would like to thank our Sponsors and Exhibitors:

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  Improving Software Economics

- **the Westfall Team**
  Partnering for Software Excellence

- **LEAN SOLUTIONS INSTITUTE, Inc.**
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  Process Innovation at the speed of life

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  Software Quality Association of Denver

- **THE IT SUMMIT**

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