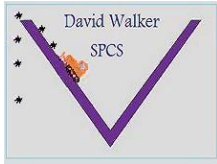




# Software Quality Live

3<sup>rd</sup> Quarter 2009

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## Questions or comments?

### See:

[Software Division Web Site](#)

[Software Division Management](#)

### Or Contact:

[Bill Trest](#), Chair

[Nicole Radziwill](#), Chair-Elect

[Tom Ehrhorn](#), Secretary

[Brenda Fisk](#), Treasurer

[Tom Ehrhorn](#), Newsletter Editor

How can we improve Software Quality Live? Does this issue provide helpful information? [Let us know!](#)

## ANNOUNCEMENTS

### SQP Journal Seeks Volunteers – Sue Carroll

Software Quality Professional (SQP) Journal is an ASQ journal supported by the ASQ Software Division. Each issue has 3-4 peer-reviewed articles, book reviews, and a Quality Nugget. If you would like to write an article for the journal – [see the author guidelines](#). If you would like to write a Quality Nugget – it is around 1000 words and should be sent directly to me. The Quality Nugget editor will review it. Please help us out with some practical tips that can be easily used by the readers of SQP. If you would like to volunteer to review articles or books, or write a letter to the editor contact [sue\\_carroll@bellsouth.net](mailto:sue_carroll@bellsouth.net).

In each quarterly issue there is an article that is available to non-subscribers. The abstract and a link to the current article is in the Articles section of this newsletter.

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## CONFERENCES & WEBINARS



### International Conference on Software Quality 2009

November 10-11, 2009  
Pre-conference Tutorials on November 9, 2009  
Hilton Northbrook  
Northbrook (Chicago), Illinois

**Theme: Controlling Software Before Software Controls You!**

#### Conference Highlights

- Keynote presentations:
  - Bill Curtis, Senior Vice President and Chief Scientist, CAST Software
  - Joe Jarzombek, Director for Software Assurance, National Cyber Security Division, Department of Homeland Security
  - Edy Liongosari, Global Director of System Integration Research, Accenture Technology Labs
- Job information exchange and on-site recruiters with resume assistance
- Social event and networking
- ASQ certification exams (held on Sunday, Nov. 8)

#### Full Day Tutorials (November 9, 8:00 a.m. – 5:00 p.m.)

Managing Testing Projects, **Robin Goldsmith**  
Requirements-based Estimating and Scheduling Best Practices, **Steve Rakitin**  
Unleash the Power of Inspections, **Rebecca Staton-Reinstein**  
Using Root Cause Analysis Effectively, **Ed Weller**  
Software Metrics and Analysis – A CSQE Mini-Refresher, **Linda Westfall**

#### Morning Tutorials (November 9, 8:00 a.m. – 12:00 noon)

Controlling the Internal Quality of IT Applications Before They Embarrass You, **Bill Curtis**  
Agile Methods and Process Discipline, **Mark Paulk**

#### Afternoon Tutorials (November 9, 1:00 p.m. – 5:00 p.m.)

Economics of Software Quality Engineering, **Taz Daughtrey**  
Best-In-Class Early Defect Detection and Defect Prevention to Achieve Measurable ROI, **Timothy G. Olson**

For technical presentation tracks, additional information, or for registration, visit the conference web site <http://www.asq-icsq.org>

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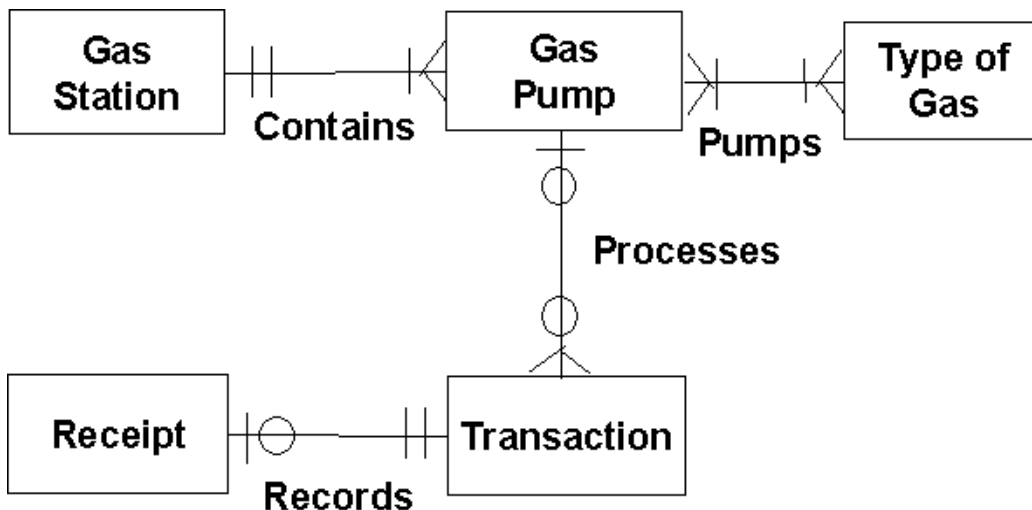
## COLUMNS

### Get Certified

#### CSQE Quiz for 3<sup>rd</sup> Quarter 2009 By Linda Westfall

Note: The items in these quizzes are NOT from the past CSQE examinations NOR were they created as part of the CSQE exam development process.

1. Which of the following is a characteristic of a good audit interview question?
  - A. It is a compound question
  - B. It focuses on sociological issues
  - C. It is an open ended question
  - D. It defines a specific context
2. Maintainability requirements for a new software product would most likely be elicited from which of the following product stakeholder groups?
  - A. Developers
  - B. Distributors
  - C. Direct users
  - D. Customers



3. Based on the entity relationship diagram above, which of the following is a one to many relationship?
  - A. Gas Pump to Type of Gas
  - B. Gas Station to Gas Pump
  - C. Transaction to Gas Pump
  - D. Transaction to Receipt
4. A requirement states that, "A newly added user to the system will default to read-only privileges when accessing the customer information database." This is an example of which of the following

types of requirements?

- A. Performance
- B. Usability
- C. Safety
- D. Security

5. Function points are used to measure a software product's:

- A. capacity.
- B. complexity.
- C. size.
- D. maintainability.

6. The configuration of the environment being used to execute the tests, the date and time testing occurred, and the sequence of test execution are examples of the information documented in a:

- A. test report
- B. test log.
- C. test plan.
- D. test case.

7. Which of the following software artifacts is LEAST likely to be designated as a configuration item?

- A. Source code
- B. Test logs
- C. Design specifications
- D. Project plans

### *Answers to the Certified Software Quality Engineering Quiz for 3<sup>rd</sup> Quarter 2009*

1. **Answer C is correct.** Audit interviews are used to gather information from interviewees through their answers to questions. The intent of interview questions is to prompt the interviewee to do most of the talking. In order to accomplish this, the interviewer should ask open-ended, interview questions. Compound questions ask several questions at a time and can confuse the interviewee. Audit interview questions should focus on the products, projects, processes or systems being audited and not on people (sociological) issues. Interview questions should also be as context free as possible so as not to box in the answer or give desired answer away with the wording of the question. **CSQE Body of Knowledge Area: I.D.3**
2. **Answer A is correct.** Developers would be most concerned with maintainability requirements (ease of change and ease of correction) since they are individuals who actually maintain/change the software product. Since distributors, direct users, and customers of the software never directly maintain/change the software itself, they are less likely to be involved in eliciting maintainability requirements. **CSQE Body of Knowledge Area: II.A.2**
3. **Answer B is correct.** The outside set of symbols shows the cardinality with the single line showing a one relationship and the split triple line showing a many relationship. Therefore, the Gas Station to Gas Pump is a one to many relationship. Gas Pump to Type of Gas is a many to many

relationship. Transaction to Gas Pump is a many to one relationship. Transaction to Receipt is a one to one relationship. **CSQE Body of Knowledge Area:** III.C.3

4. **Answer D is correct.** One of the issues of security is maintaining access control. Defaulting the access to the minimum privileges reduces the security risk. **CSQE Body of Knowledge Area:** IV.C.2
5. **Answer C is correct.** Function points measure a software product's size in terms of the amount of functionality it contains. **CSQE Body of Knowledge Area:** V.B.1
6. **Answer B is correct.** The test log should include generic information about the test execution session including a description of the session, the specific configuration environment, the version and revision of the software being tested and the tester(s) and observers (if any). The tester then logs the specifics about each test case or procedure executed, including their sequence with specific times and dates, the specific input selected, any failures or other anomalies observed, and other observations or comments worthy of note. **CSQE Body of Knowledge Area:** VI.D
7. **Answer B is correct.** The following should be placed under configuration control as configuration items: externally delivered software products and data, designated internal software work products and data, designated support tools used to create or support the software product. Test logs are ongoing quality records of testing execution and therefore they do not require change control (since their historic information is typically not changed after it is documented and new information does not have to be approved by a formal change control authority). **CSQE Body of Knowledge Area:** VII.B.1

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## Medical Device Software

Join us on the ASQ Software Quality Discussion Boards – Topics including Medical Device Software

By David Walker

There are a number of good threads regarding medical device software on the ASQ Software Discussion Boards.

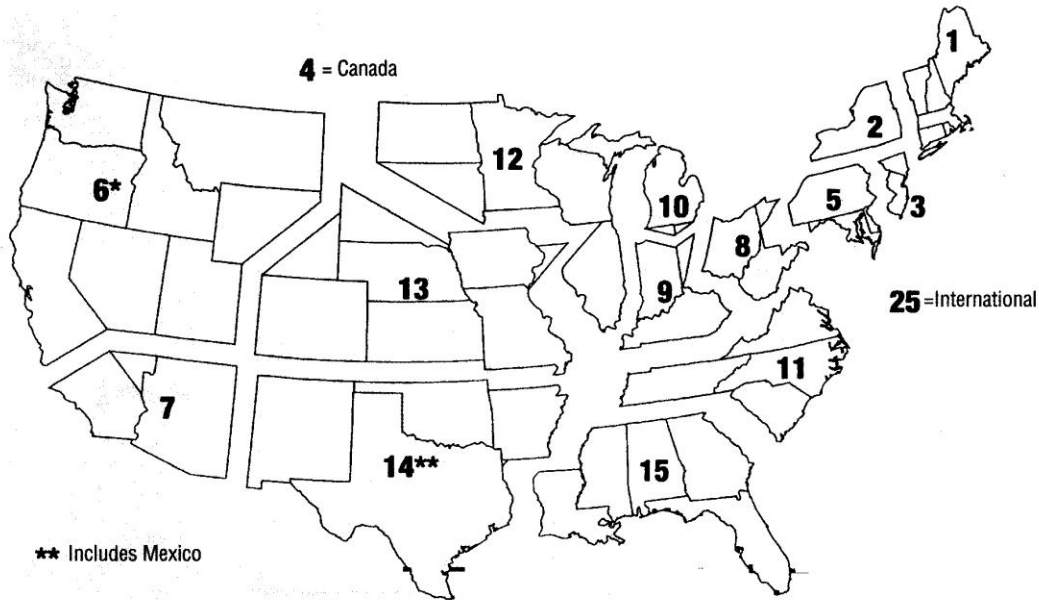
Get Involved:

<http://www.asq.org/software/interaction/discussion-board-software.html>

*David Walker is the immediate past chair of the ASQ Software Division. He represents ASQ's interests in medical device software standards development through membership on the AAMI Medical Device Software Standards Committee.*

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## FROM THE REGIONS



The following links will provide you with a snapshot of the latest activities in the regions.

### Region 1 (New England): Howie Dow

Need to network? Want to learn? Interested in software? The Software Quality Group of New England (SQGNE) and Boston Software Process Improvement Network (Boston SPIN) meet monthly.

SQGNE meets on the 2<sup>nd</sup> Wednesday of the month at Sun Microsystems in Burlington, Massachusetts. The early fall program is:

September 9: Using Virtualization to Accelerate Quality/Test Cycles – Eric Lotter

October 14: Maximizing the Value of Testing to the Business – Marc René

November 11: Requirements exercise – Howie Dow and Steve Rakitin

December 9: Rightsizing Your Project in a Down Economy – Michael Mah

SQGNE is undergoing changes. First, the group has a new web site: [www.sqgne.org](http://www.sqgne.org) and second, the group is moving towards registering as a non-profit organization so that it can attract sponsors.

Boston SPIN meets at the MITRE Corporation in Bedford, Massachusetts on the 3<sup>rd</sup> Tuesday of the month and their web site is <http://boston-spin.org/>. Check out the web site for the fall 2009 program.

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### Region 6 Pacific Northwest – Tom Gilchrist

If you are in the Seattle area on the third Thursday of every month (except December), The Seattle Area Software Quality Assurance Group (SASQAG) holds monthly public meetings in the Seattle area. SASQAG also supports certification and study groups. If you are in the area and want to attend, please look at [www.sasqag.org](http://www.sasqag.org) for upcoming events, directions, and meeting time.

October 26-28, 2009, the annual Pacific Northwest Software Quality Conference will be held (<http://www.pnsqc.org/>) in Portland, Oregon. The title of this year's theme, "Moving Quality Forward", is slightly ambiguous on purpose...consider these two possibilities:

- Moving the profession of software quality ahead - making it more of a recognized field, like civil engineering.
- Moving the validation and verification tasks further upstream in the software development life cycle and even moving them into other functions of the organization (e.g. finance, legal, service, sales, and marketing).

PNSQC has a new venue for PNSQC 2009 — the World Trade Center Portland.

This venue will offer an environment more conducive for intimate networking and interaction among attendees. The distinctive facility, located in the heart of downtown Portland, offers a breathtaking setting and spectacular backdrop overlooking the Willamette River and Tom McCall Waterfront Park. The facility offers convenient access to hotels, shopping, and transportation.

The Seattle SPIN (Software Process Improvement Network) is holding meetings on the first Tuesday, five months a year.. The organization is driven with a single, clear-cut goal in mind: change an organization in a way that improves that organization's ability to develop software. If you are interested in more information on SeaSpin, you can go to <http://www.seaspin.org>

AS9115 Software Quality Program for Aerospace Organizations – This standard is a supplement to AS9100 for those organizations that supply software as an end item or as part of a product. The supplement is not mandatory unless called out by the software acquirer. It provides the acquirer/auditor greater granularity and specificity when auditing the software arena. This gives the customer greater assurance that the principles and disciplines of AS9100 will be enforced for software development as well as hardware. The supplement is in the final ballot review. The authors are meeting in Washington D.C. in Aug to reconcile all international comments. Mike Kress is the leader of the AAQG team on this project and may be reached at michael.p.kress@boeing.com.

If you have information on local software quality and testing events in your area of Region 6, please send them to me for our events calendar Visit <http://www.tomgtomg.com/asq6> for information on events around Region 6.

Tom Gilchrist, Region 6 ASQ Software Division  
[tomg@tomgtomg.com](mailto:tomg@tomgtomg.com)

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### **Region 10 Michigan, Northeast Indiana & Northwest Ohio – Louise Tamres**

The Great Lakes Software Excellence Conference will be held Nov. 16 & 17 in Grand Rapids, Michigan. Program and conference information is available at [glsec.org](http://glsec.org).

The Great Lakes SPIN meets the second Thursday of the month. Locations vary between Oakland University in Rochester, University of Michigan-Dearborn, and Schoolcraft College in Livonia. The GL-SPIN frequently sponsors CMMI and SPICE training programs. As of this report, no fall programs have been announced. Consult the web site [gl-spin.org](http://gl-spin.org) for information about upcoming programs and events.

Michigan Agile Enthusiasts offers meetings and programs at various locations. Find out about their events at [agileenthusiasts.ning.com](http://agileenthusiasts.ning.com).

The Southeastern Michigan Software Quality Assurance Association (SEMISQAA) is a local chapter of the Quality Assurance Institute (QAI). The group meets monthly on the second Tuesdays, and it also sponsors QAI training sessions. Upcoming meetings include a presentation on "Understanding Performance Testing", Sept 8, in Livonia. On October 13, the ITEC Conference will be held in Novi. For more information, go to [semisqaa.org](http://semisqaa.org).

ASQ chapters in southeastern Michigan provide programs primarily related to manufacturing. Any programs focusing on software and software quality will definitely be highlighted when available.

Are any software quality professionals in southeastern Michigan interested in CSQE exam preparation or other training courses? If either of these educational opportunities interest you (whether as an attendee or as an instructor), do let me know at [l\(dot\)tamres\(at\)computer\(dot\)org](mailto:l(dot)tamres(at)computer(dot)org).

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