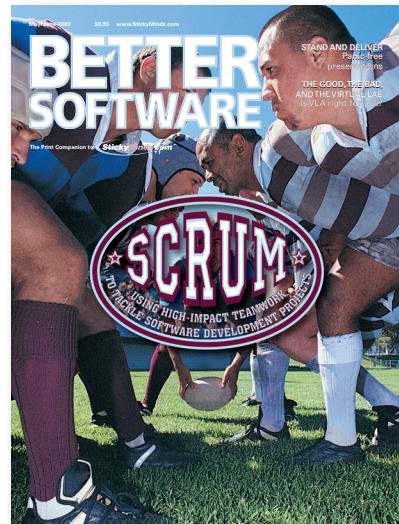
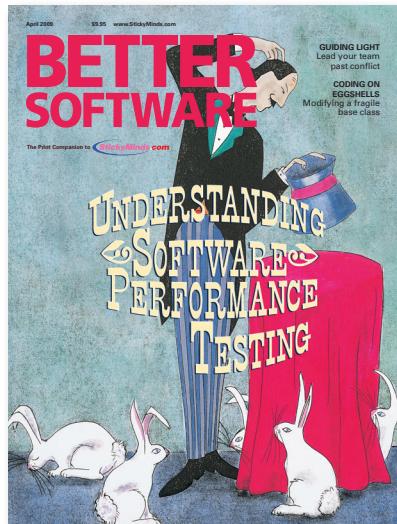
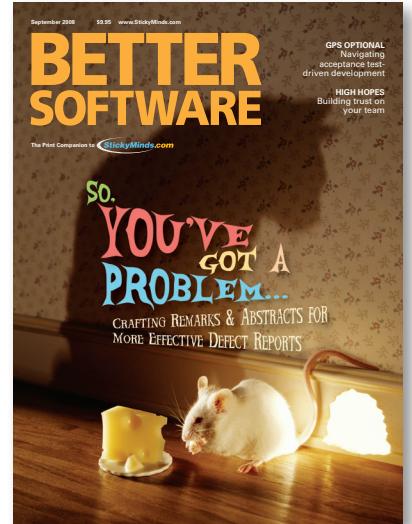
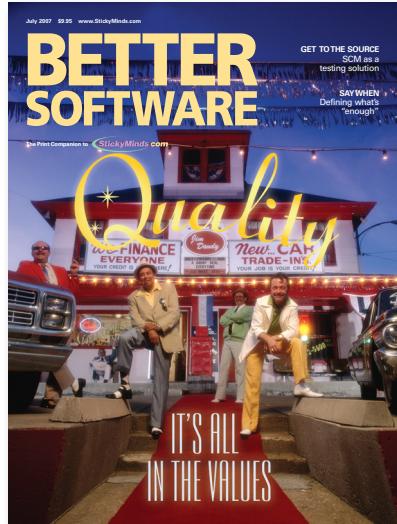
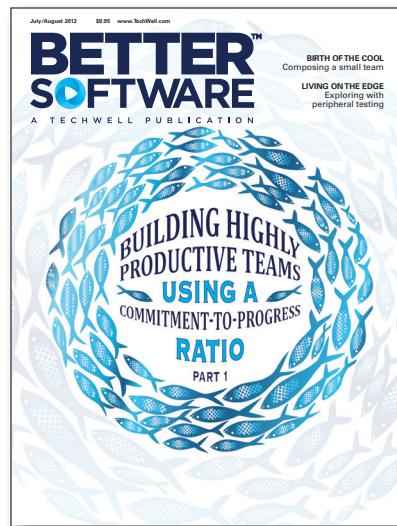
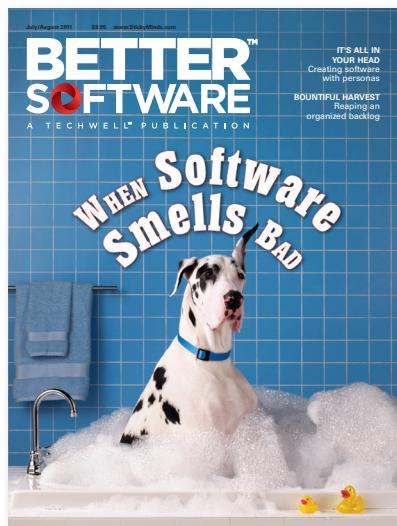
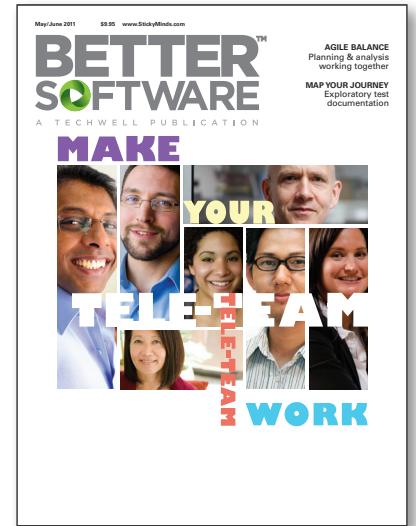
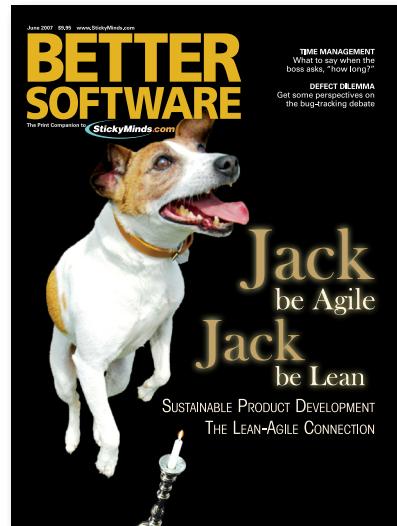
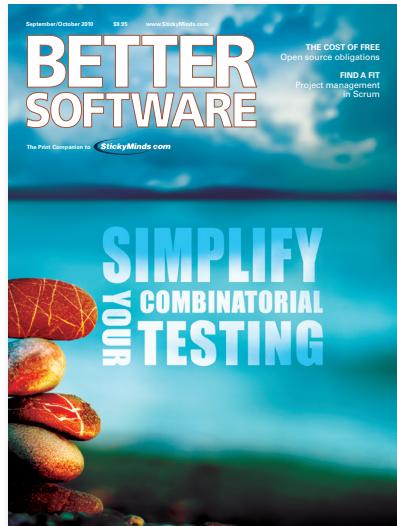


cathy clinger



cathy clinger



cathy clinger

Special Announcement	<p>CM CROSSROADS A TECHNICAL COMMUNITY</p> <p>AGILE JOURNAL A TECHNICAL COMMUNITY</p> <p>Excited News for Better Software Readers: We've added CM Crossroads and Agile Journal to our library of resources to help you build better software!</p> <p>Software Quality Engineering, Inc. (the publisher of <i>Better Software</i> magazine) has purchased all assets associated with the CM Crossroads and Agile Journal web communities, including all online publications, virtual expos, web seminars, and content associated with both websites.</p> <p>What this means for our <i>Better Software</i> magazine subscribers: You will have access to the high-quality content and expert opinions you've come to rely on, but we've added new voices, new viewpoints, and new outlets for learning. Our technical coverage now includes agile development, configuration management, project management, software testing, and related topics on career development, management, and leadership for IT professionals.</p> <p>About CM CROSSROADS AND AGILE JOURNAL</p> <p>Since 1998, CM Crossroads has been the web's most comprehensive developer community and resource center focused on configuration management and application lifecycle management. CM Crossroads offers interactive discussion forums, a broad range of original articles and newsletters, a career search center and jobs board, and an extensive library of resources in the CM Yellow Pages. CM Crossroads hosts the Configuration Management Body of Knowledge and is the publisher of the Configuration Management Journal.</p> <p>Agile Journal is the premier social media community for agile. Focused on providing members the information and resources they need to develop software for an agile business. Agile Journal delivers thought leadership and pragmatic advice from a wide range of industry experts, as well as direct feedback from hands-on developers and project managers. The Agile Journal community enables users to interact with their peers and share ideas on agile and lean topics in an environment that is both professional and friendly. Agile Journal offers a wide range of educational videos, freely available webinars, and articles from some of the industry's innovators and thought leaders. Agile Journal is the publisher of the Agile Journal online magazine.</p> <p>Visit cmcrossroads.com and agilejournal.com to find out more about these communities and to subscribe to CM Journal or Agile Journal.</p>	Editor's Note
 <p>LONG-DISTANCE RELATIONSHIPS..... After my return from working the STAREAST conference in Orlando—an event I look forward to all year because I use a few hours of the week to sit down with the rest of the editorial team and begin planning content for the next year. This might not seem like an event worth mentioning; people sit down with their teammates all the time. The significant part of this meeting is that two of the three editors live and work far from the home office, so it's always fun to meet in person.</p> <p>As a member of a distributed team with very flexible work hours, I am always looking for tools and tips for facilitating communication among team members. To my delight, this issue's cover story could not have been more helpful if I had commissioned Lisa and Nando to write it just for me.</p> <p>"<i>Make Your Tele-teams Work!</i>" is a real-life account of how one distributed development team shortens the distance between its members using a variety of high- and low-tech tools—one of which, "Virtual Nando," I find especially to be a stroke of genius. In this article, Lisa and Nando address specific challenges programmers and testers face on virtual teams and offer helpful tips for a productive and healthy working relationship.</p> <p>Also in this issue, Jonathan Koll dispels some myths regarding documentation requirements on exploratory testing projects, which will enable you to explore away, even on highly regulated software. In "Documenting Your Exploratory Testing," Jonathan describes several documentation methods that translate well to these types of projects, including guidance documents to help focus testing, test coverage reports, and recording what you tested.</p> <p>Personal favorites Ellen Gottesdiener and Mary Gorman return this issue with an enlightening look at the relationship between planning and analysis on agile projects. When done hand in glove, these activities work together to groom your backlog and maximize business value.</p> <p>As always, I hope you enjoy this issue of <i>Better Software</i> magazine. Email me to let me know how you've put the content to work for you.</p> <p>Happy reading, <i>Lee Copeland</i> Heather Shanholzer hshanholzer@zqce.com</p>		

Technically Speaking	
<p>Copeland on Weinberg</p> <p>In work and in life, Lee Copeland has found value in the wisdom of friends and mentors like Jerry Weinberg.</p> <p>by Lee Copeland copeland@zqce.com</p> <p>I was at a standstill. I called Jerry at his home in Colorado, hoping for perhaps twenty minutes of advice over the phone. After explaining my situation, Jerry thought for a while and replied, "I'm going to call you back in a few days for a short visit. He invited me to come to his home in Colorado. But for a day or two to fully discuss it. I explained that I had no money in the budget to pay his consulting fee. Jerry said, "It's OK. I'll do it for free."</p> <p>In November 2009, Jerry posted the on his Web site:</p> <p>I have a chronic caravanning disease and aggressive cancer that has perhaps a 25% one-year survival rate if treated. I am currently in remission. This nasty thing can move very quickly throughout my body. The MDs have recommended a combination of chemotherapy, radiation, and surgery. I am currently undergoing treatment plan. It's not treatable, at least not curable. Cancer is not positive. It's a negative disease that can alleviate my suffering and prolong my life. I'm going to cut short almost of my communication and say good-bye to all of my loved ones, unless a miracle occurs. (2)</p> <p>Jerry has completed therapy and just a short time ago wrote, "More good news! My cancer is still well enough and also strong enough to get back to work on my book. All in all, good signs of my recovery." (3)</p> <p>Jerry continues: "I am a member of the PSL workshop. PSL is an learning experiences, training, and consulting firm. My wife, Jerry's recyclable stories, was one than a participant in the class. She is a valuable member of the team, and interactions—in a way that became an observer has been a great source of inspiration. Jerry types helped me understand who world doesn't think and care about computers. Jerry's friends each contributed a chapter to the <i>Work of Gerald Weinberg</i> book. Jerry's friends are doing the unwriting pawns of those who would use our toys for not-so-felicitous ends."</p> <p>With these words, Jerry has been writing his memoirs with his friends with whom he is doing with computers worth doing? Is what you are doing with your life worth doing? All of Jerry's friends are grateful for what he has done for them, inspiring, kindred, wisdom, and love. Jerry, we at <i>Better Software</i> magazine and our readers all with you. (4)</p> <p>1 Learned to focus on what others were doing, their words, expressions, and interactions—in a way I had never done before.</p> <p>2 Learned to appreciate the value of my work.</p> <p>3 Learned to appreciate the value of my work.</p> <p>4 Learned to appreciate the value of my work.</p> <p>For more on the following topic go to: www.StickyMinds.com/bettersoftware</p> <p>■ Preferences</p>	

BETTER SOFTWARE	
<p>Volume 12, Issue 5 • September/October 2010</p>	
<p>CONTENTS</p> <p>features</p> <p>16 COVER STORY COMPILE YOUR COMBINATORIAL TESTING Combining combinatorial testing methods with statistical methods that affect a common output in complex software. But, it's easy to mistakenly become a slave to the output. Learn to overcome limitations and benefit from this technique. by Robert L. Kosick</p> <p>22 LICENSE TO OPEN SOURCE Open source is widespread and growing in many software development organizations. While there's no purchase cost, the code does come with licensing obligations. Understanding open source from an intellectual property perspective can avoid downstream legal consequences arising from unmanaged licenses. by Kamal Hassan and Katherine Chin Quee</p> <p>26 THE ROLES OF THE PROJECT MANAGEMENT OFFICE IN SCRUM Successfully adopting Scrum means understanding and perhaps defining a project management office (PMO), whose roles are often resistant to the lightweight process. Instead, they can become a critical part of agile success. Discover how an agile PMO works. by Mike Cohn</p> <p>columns</p> <p>11 TECHNICALLY SPEAKING COPELAND ON WEINBERG • by Lee Copeland Lee Copeland and Jerry Weinberg have crossed paths—both on page and in person—over the last few years. Here, Lee reflects on some of their meetings and their valuable lessons.</p> <p>12 INSIDE ANALYSIS HEARING "NO" • by Rick Bayner "No" can be disappointing. Sometimes we have difficulty hearing or dealing with No. Can we learn how to cope with No with less pain and regret? Can we learn how to prevent at least some of the time? Yes and yes!</p> <p>35 THE LAST WORD PROJECT OWNERS SHOULD CARE ABOUT QUALITY • by Roman Pöhl Project owners view quality as an ugly duckling—necessary to ship software, but nerdy and a drag. Instead, they should be guardians of quality. Only when quality meets functionality is lasting value created.</p> <p>in every issue</p> <p>Mark Your Calendar 4 Contributors 8 Editor's Note 9 Virtual Resource Shelf 14 Digital Survey Results 15 Product Announcements 33 FAQ 34 Ad Index 36</p> <p><i>Better Software</i> responses The first response to <i>Better Software</i> came from Mark, who asked for a copy of the magazine and a CD-ROM version of the software. We're happy to oblige. If you have any questions or comments, please feel free to contact us. We're here to help you succeed.</p> <p>Visit www.BetterSoftware.com at 410-961-2100.</p>	<p>26</p> <p>StickyMinds.com</p> <p> Lisa and Nando</p> <p> Heather Shanholzer</p> <p> Lee Copeland</p> <p>TEST TEAMS are stretched because their limits as leaders are asked to keep their applications in great shape despite shrinking budgets. Testers must be creative by agile development and fluid product roadmaps.</p> <p>While test managers are trying to overcome these obstacles, they are also expected to achieve test coverage that matches the needs of the market and their applications across multiple locations, languages, operating systems, hardware, and more.</p> <p>This is enough to make even the top test leaders feel like the deck is stacked against them. So, what are others are doing to alleviate the inevitable challenges?</p> <p>1. MANTAIN CONTROL</p> <p>One of the greatest concerns for test managers is maintaining control of the test cycle. The test manager maintains complete control and visibility through the entire cycle.</p> <p>In fact, companies that use crowdsourcing understand that effective, efficient, and timely management of the tactical execution and idea generation, strong management enables the processes, plans, and deadlines to remain intact.</p> <p>While there are sites that allow these companies with free accounts, most of these sites fail to provide structured community building function as well as an easy implementation strategy. Crowdsourcing is unique in that it encourages strong management and participation from the company's in-house budget.</p> <p>2. TEST COVERAGE</p> <p>Unless your application is designed for a simple and homogenous audience that is identical to your in-house test team, it's important to have a solid test coverage. Yet, filling these voids—whether they're related to browser, OS, and device—can be challenging and probably expensive, impractical, and an enormous commitment of time and resources.</p> <p>The good effect is that test managers get to use the power of crowdsourcing to have test teams of all sizes to target specific users for specific testing assignments. And, the best part is that you can hire these test teams from anywhere in the world.</p> <p>Previously, even the largest software companies could not afford to have their product tested in multiple locations, even early-stage startups can't afford not to.</p> <p>3. INCREASED APPLICATION</p> <p>Today, customers expect applications to be fast and fully functional from day one. "Good enough" is no longer an option.</p>
<p>www.StickyMinds.com SEPTEMBER/OCTOBER 2010 BETTER SOFTWARE 11</p>	

Virtual Resource Shelf

Q: What is one of your favorite books about planning or problem solving?

Software Tools
by Brian Kernighan and P.J. Plauger
It shows how two master programmers think through solving a problem.
—Mike Cohn

A Guide for Lawyers and Policymakers
by Paul Brest and Linda Hamilton Krieger
—Katherine Chin Quee

The Last Place on Earth: Scott and Amundsen's Race to the South Pole
by Roland Huntford
It's a gripping tale of leadership, teamwork, conflict, risk management, organizational politics, scope creep, project failure, burnout, resource management, and the comparative advantages and limitations of agile processes and conventional processes.
—Rick Bremer

Inside Analysis continued from Page 13
avoid taking for granted the available and to accept No when Yes is impossible. (Example 13)

Does Not Really Break my world? No might be the end of any plans that we assumed Yes, but it usually isn't the end of the world as we know it. To examine the No version of the world, ask yourself, "What else could I do?" If I'm not getting what I wanted, how would I do it now? The essential question is: How can you re-point yourself toward something else you wanted? (Example 13)

Final Words
Final reflection can facilitate learning, conduct a No retrospective after any especially difficult—or especially successful—incident. Reflect on what worked and what didn't—without being judgmental. If you're like me, you might hesitate to reflect on this because such reflection might be a bit painful, that's just your self-telling you No. But, you know how to deal with that, right? (end)

Memory Leak FOUND

MemoryScape enables rapid, visual analysis of memory leaks, overruns and usage

**C, C++, Fortran
Linux, Unix, Mac**

Digital Edition Exclusive

Q: Do You Work on a Virtual Team?

What is the typical result of working on a virtual team?

Response	Percentage
Very good	27.4%
Good	37.7%
Neutral	24.7%
Poor	11.5%
Very poor	3.5%

What is the typical challenge of working in a virtual team?

Challenge	Percentage
Communication	50.6%
Teamwork	22.6%
Leadership	16.5%
Technology	9.3%

Download the digital edition to get counted in this issue's Digital Survey:
Do you work on software apart from your day job?
www.it-ebooks.com/itbooks/sqge/bettersoftware_0910/

Q&A

Executive Interview
Sam Guckenheimer
MICROSOFT VISUAL STUDIO
interview by Chris Menegay

Sam Guckenheimer, product owner for Microsoft's Visual Studio product line, is in charge of "anything that has to do with the Visual Studio name on it." Sam recently met with Chris Menegay to talk about ALM, QA tools, and developer/tester interaction.

Q: What does a product owner do?

A: My job is roughly 50/50 external and internal. I think in terms of where the product line needs to evolve. How do we balance the interests of different customers and the different business priorities that we have? How do we delight our customers, grow the community, and make sure that we're meeting our own internal needs.

Q: What's the strategy behind Microsoft's ALM tools?

A: I joined Microsoft in 2003 and at that time, Microsoft had the world's most widely used individual development environment. The vision that drove me to join was the opportunity to produce the world's best team development environment. We've tried to create a product line that would support the needs of the developer, tester, and manager. We've tried to make sure that we can support the needs of the total flow done by a collaborative team. That functionality is something that we put into the different products. For more insight, I'd encourage these principles in my new book, *Agile Software Engineering with Visual Studio*, from O'Reilly to Continuous Feedback.

Q: How does Team Foundation Server (TFS) relate to Visual Studio?

A: TFS is the core of the Visual Studio product line. It's the basic as source control, work tracking, build, test management, and test lab management. The backlog is managed in TFS. The basics are source control, work tracking, building, testing, and the test management are in TFS. You access that through different clients.

Q: With the release of Visual Studio 2010 Test Professional, Microsoft has formally entered the QA tools space. Why?

A: We've been doing QA for quite some time now, thinking of testing as an isolated activity. We focused on the interaction between the tester and developer, so that they would get fast. We would not be looking at testing as something that is done in isolation, but we would be looking at it as an integral part of what a tester did in order to improve the software that the team delivered to the end customer. We thought it was important to bring that into the main product line.

Q: What do you think is something you've missed?

A: Development/tester interaction is in one area where, although we have much work to do, we made a huge step forward. We introduced six mechanisms to facilitate the interaction. We hope that the developer can have better visibility into what the tester is doing. We also have a traceability table that happened on the servers, and snapshot virtualized labs that capture the server machines in the state of the last activity that happened on the servers, and snapshots virtualized labs that capture the server machines in the state of the last activity that happened on the servers.

That is the easiest thing for customers to get value out of?

Microsoft has been working on the Visual Studio Online service. It's a cloud-based service that you can provision a team in under an hour to get started, and it's able to produce with continuous integration, test management, and a fully web interface that lets your testers and developers work together to apply modern agile practices. So you can be productive in the cloud.

Is there anything else you'd like to add?

It's exciting in Visual Studio Ultimate that people have but likely aren't using? Not everybody knows that with Ultimate they have all of Visual Studio Test Professional, a fully capable product they can do all of the capture described before, reporting fully actionable bugs. They can use this in conjunction with many other tools. We've got a lot of great tools for the developer and performance improvement should be all around. Visual Studio Ultimate gives you the ability to drive an unlimited number of virtual users with no additional license fees, proper for Microsoft, and millions of users hit these websites.

We're using the beta for our own development, and it's working. You just sign up with the Windows Live ID to get an account provisioned in seconds. You can be up and running with your code from the web, any Visual Studio edition, and from Eclipse.

www.StickyMinds.com SEPTEMBER/OCTOBER 2011 BETTER SOFTWARE 19

MARK YOUR CALENDAR

SQE TRAINING
www.sqetraining.com/verification
Software tester certification
www.sqetraining.com/publication
September 26–28, 2010
San Diego, CA

October 5–7, 2010
Baltimore, MD

October 12–14, 2010
Raleigh, NC
Omaha, NE

conferences

STARWEST 2010
Software Testing Analyst Show
www.sqa.com/starwest
September 26–October 1, 2010
Hilton San Diego Bayfront
San Diego, CA

Agile Development Practices East
www.sqa.com/adpeast
November 14–19, 2010
The Ritz-Carlton
Orlando, FL

STARWEST 2011
Software Testing Analysis & Review
www.sqa.com/starwest
May 14–16, 2011
Rosen Shingle Creek
Orlando, FL

BETTER SOFTWARE

Publisher
Wes Madole
President
Drew Thorne
Vice President of Publishing
Holly N. Bruckman
Editor in Chief
Heather Shorlock
Editorial
Managing Technical Editor
Lee Copeland
Online Editor
Francesca Serafini
Online Editor
Joseph McAllister
Production Coordinator
Christy Williams
Design
Creative Director
Cathy Clinger
Art Director
Sales Manager
Shawn Young
Sales Manager
Sarah Hilt
Production Coordinator
Aptil Evans
Content Marketing
Group Lead
Jamie Green-Gap
Product Marketing Manager
Dana Ladd
Marketing Coordinator
Stephanie Fender

Better Software Conference
www.sqa.com/bettersoft
June 6–10, 2011
Caesar's Palace
Las Vegas, NV

A PUBLICATION OF SOFTWARE QUALITY ENGINEERING

CONTACT US
Editorial: editor@bettersoftware.com
Subscriber Services: info@bettersoftware.com
Phone: 800.288.8770
Fax: 904.278.4380
Address:
Software Quality Engineering, Inc.
2300 University Boulevard, Suite 300
Orange Park, FL 32073

4 BETTER SOFTWARE SEPTEMBER/OCTOBER 2010 www.StickyMinds.com

MIND THE GAP

Using a Requirements Composition Table to Assess Test Coverage

BY YURI CHERNAK

STEP 1: Decompose the Application Functionality

STEP 2: Identify Core Features

STEP 3: Identify Crosscutting Concerns

STEP 4: Develop a Requirements Composition Table

STEP 5: Establish Traceability Between Requirements and Regression Tests

STEP 6: Measure Test Coverage and Identify Gaps

STEP 7: Evaluate Test Coverage and Identity Gaps

STEP 8: Measure Test Coverage and Identify Gaps

STEP 9: Identify Core Features

STEP 10: Establish Traceability Between Requirements and Regression Tests

STEP 11: Develop a Requirements Composition Table

STEP 12: Establish Traceability Between Requirements and Regression Tests

STEP 13: Develop a Requirements Composition Table

STEP 14: Establish Traceability Between Requirements and Regression Tests

STEP 15: Develop a Requirements Composition Table

STEP 16: Establish Traceability Between Requirements and Regression Tests

STEP 17: Develop a Requirements Composition Table

STEP 18: Establish Traceability Between Requirements and Regression Tests

STEP 19: Develop a Requirements Composition Table

STEP 20: Establish Traceability Between Requirements and Regression Tests

STEP 21: Develop a Requirements Composition Table

STEP 22: Establish Traceability Between Requirements and Regression Tests

STEP 23: Develop a Requirements Composition Table

STEP 24: Establish Traceability Between Requirements and Regression Tests

STEP 25: Develop a Requirements Composition Table

STEP 26: Establish Traceability Between Requirements and Regression Tests

STEP 27: Develop a Requirements Composition Table

STEP 28: Establish Traceability Between Requirements and Regression Tests

STEP 29: Develop a Requirements Composition Table

STEP 30: Establish Traceability Between Requirements and Regression Tests

STEP 31: Develop a Requirements Composition Table

STEP 32: Establish Traceability Between Requirements and Regression Tests

STEP 33: Develop a Requirements Composition Table

STEP 34: Establish Traceability Between Requirements and Regression Tests

STEP 35: Develop a Requirements Composition Table

STEP 36: Establish Traceability Between Requirements and Regression Tests

STEP 37: Develop a Requirements Composition Table

STEP 38: Establish Traceability Between Requirements and Regression Tests

STEP 39: Develop a Requirements Composition Table

STEP 40: Establish Traceability Between Requirements and Regression Tests

STEP 41: Develop a Requirements Composition Table

STEP 42: Establish Traceability Between Requirements and Regression Tests

STEP 43: Develop a Requirements Composition Table

STEP 44: Establish Traceability Between Requirements and Regression Tests

STEP 45: Develop a Requirements Composition Table

STEP 46: Establish Traceability Between Requirements and Regression Tests

STEP 47: Develop a Requirements Composition Table

STEP 48: Establish Traceability Between Requirements and Regression Tests

STEP 49: Develop a Requirements Composition Table

STEP 50: Establish Traceability Between Requirements and Regression Tests

STEP 51: Develop a Requirements Composition Table

STEP 52: Establish Traceability Between Requirements and Regression Tests

STEP 53: Develop a Requirements Composition Table

STEP 54: Establish Traceability Between Requirements and Regression Tests

STEP 55: Develop a Requirements Composition Table

STEP 56: Establish Traceability Between Requirements and Regression Tests

STEP 57: Develop a Requirements Composition Table

STEP 58: Establish Traceability Between Requirements and Regression Tests

STEP 59: Develop a Requirements Composition Table

STEP 60: Establish Traceability Between Requirements and Regression Tests

STEP 61: Develop a Requirements Composition Table

STEP 62: Establish Traceability Between Requirements and Regression Tests

STEP 63: Develop a Requirements Composition Table

STEP 64: Establish Traceability Between Requirements and Regression Tests

STEP 65: Develop a Requirements Composition Table

STEP 66: Establish Traceability Between Requirements and Regression Tests

STEP 67: Develop a Requirements Composition Table

STEP 68: Establish Traceability Between Requirements and Regression Tests

STEP 69: Develop a Requirements Composition Table

STEP 70: Establish Traceability Between Requirements and Regression Tests

STEP 71: Develop a Requirements Composition Table

STEP 72: Establish Traceability Between Requirements and Regression Tests

STEP 73: Develop a Requirements Composition Table

STEP 74: Establish Traceability Between Requirements and Regression Tests

STEP 75: Develop a Requirements Composition Table

STEP 76: Establish Traceability Between Requirements and Regression Tests

STEP 77: Develop a Requirements Composition Table

STEP 78: Establish Traceability Between Requirements and Regression Tests

STEP 79: Develop a Requirements Composition Table

STEP 80: Establish Traceability Between Requirements and Regression Tests

STEP 81: Develop a Requirements Composition Table

STEP 82: Establish Traceability Between Requirements and Regression Tests

STEP 83: Develop a Requirements Composition Table

STEP 84: Establish Traceability Between Requirements and Regression Tests

STEP 85: Develop a Requirements Composition Table

STEP 86: Establish Traceability Between Requirements and Regression Tests

STEP 87: Develop a Requirements Composition Table

STEP 88: Establish Traceability Between Requirements and Regression Tests

STEP 89: Develop a Requirements Composition Table

STEP 90: Establish Traceability Between Requirements and Regression Tests

STEP 91: Develop a Requirements Composition Table

STEP 92: Establish Traceability Between Requirements and Regression Tests

STEP 93: Develop a Requirements Composition Table

STEP 94: Establish Traceability Between Requirements and Regression Tests

STEP 95: Develop a Requirements Composition Table

STEP 96: Establish Traceability Between Requirements and Regression Tests

STEP 97: Develop a Requirements Composition Table

STEP 98: Establish Traceability Between Requirements and Regression Tests

STEP 99: Develop a Requirements Composition Table

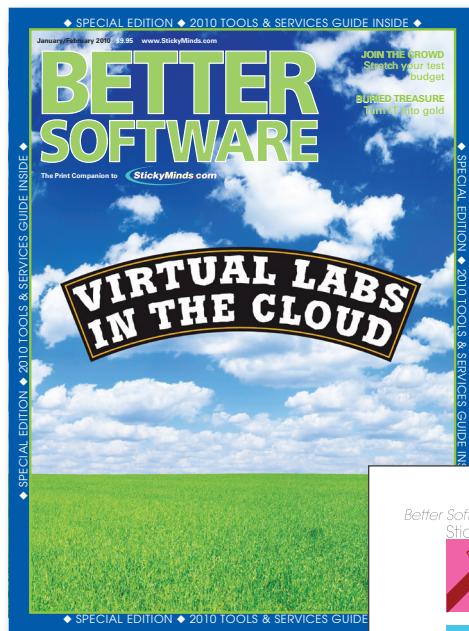
STEP 100: Establish Traceability Between Requirements and Regression Tests

38 BETTER SOFTWARE MARCH 2008 www.StickyMinds.com MARCH 2008 BETTER SOFTWARE 39

904.347.7339, tel. | catherinejclinger@gmail.com

MAGAZINE DESIGN

cathy clinger



BETTER SOFTWARE

The Print Companion to StickyMinds.com

VIRTUAL LABS IN THE CLOUD

JOIN THE CROWD Stretch your test budget

BURIED TREASURE Turn IT into gold

SPECIAL EDITION • 2010 TOOLS & SERVICES GUIDE INSIDE

SPECIAL EDITION • 2010 TOOLS & SERVICES GUIDE INSIDE

SPECIAL EDITION • 2010 TOOLS & SERVICES GUIDE INSIDE

SPECIAL EDITION • 2010 TOOLS & SERVICES GUIDE INSIDE

BETTER SOFTWARE

2011 Tools & Services Guide

The 2011 Tools & Services Guide is a collection of sponsored tools that can help you smarter and build better software. The information in this guide has been provided by the vendors and in no way implies endorsement by **Better Software** magazine, StickyMinds.com, or Software Quality Engineering.

contents

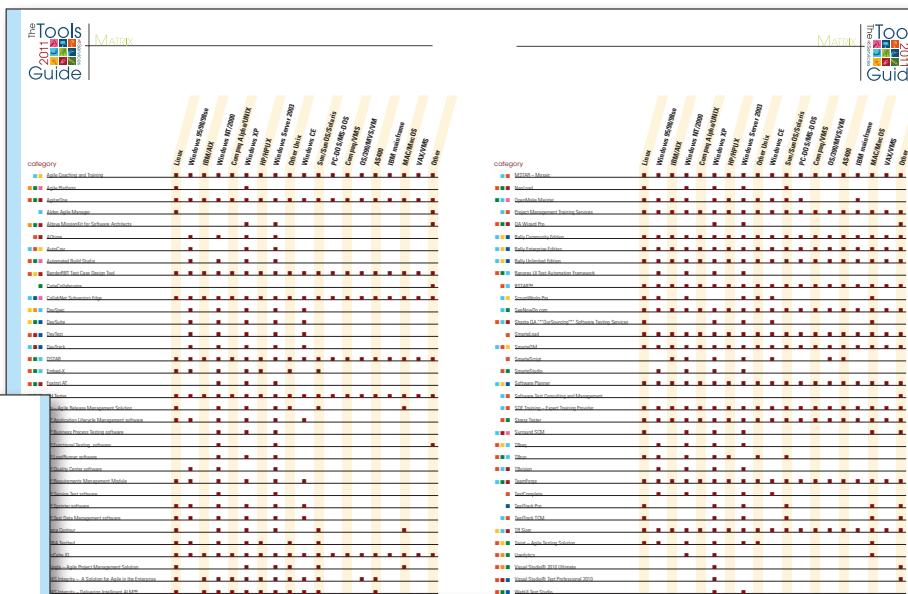
CONFIGURATION MANAGEMENT	30
DEFECT TRACKING	31
DESIGN & ARCHITECTURE	34
DEVELOPMENT & DEPLOYMENT	36
MEASUREMENT & REPORTING	42
PROCESS & PROJECT MANAGEMENT	46
REQUIREMENTS	54
SECURITY	58
TEST & EVALUATION	59

matrix legend

- Configuration Management
- Design & Architecture
- Development & Deployment
- Measurement & Reporting
- Process & Project Management
- Requirements
- Security
- Test & Evaluation

www.StickyMinds.com

JANUARY/FEBRUARY 2011 BETTER SOFTWARE 1



Development & Deployment

Ranorex Ranorex is a Windows UI Test Automation Framework. Ranorex is an integrated suite of tools for agile software development. It supports many different application types, including .NET, Java, WPF, Win32, Microsoft Office, Adobe Flash/Flex, and Java. The Ranorex feature analysis captures up to 100,000 UI tests, and it is able to automatically generate test automation code for .NET and Java. Ranorex also provides support for distributed test environments. Ranorex 3.4 includes test project management, an intuitive code editor, code comparison, debugging, and a watch window.

telephone 43 716 29 13 28
training available Yes
trial available No
address Dr. Spengergasse 289
Graz, Steiermark 8054
Austria

SEENowDO SEENowDO is BigValue's web-based real-time collaboration tool. SEENowDO provides simple, flexible, visual backboards designed specifically for distributed agile and Scrum teams. This highly interactive collaborative environment allows users to "hotkey" individual team members. The "Instant Sync" capability allows individuals to take advantage of collaborative backboards across distributed teams in real-time. No downloads. No logins. No annoying ads. Completely free.

telephone 617 218 3021
training available No
trial available No
address Suite 4A
Boston, MA 02127

SmartStudio SmartStudio is an advanced GUI and API-driven functional and regression test automation tool suitable for software developers and QA power-users. SmartStudio provides an open API with which you can meet virtually any need. It includes rapid script generation capabilities, a comprehensive reporting system, and extensive cross-platform support for the following environments: Adobe Flash/Flex, Microsoft .NET, Win32, and cross-browser testing using DirectX, OpenGL, and WebGL. www.smartsystudio.com info@smartsystudio.com

telephone 512 782 9409
training available No
trial available No
address 3300 Peachtree Ave.
Atlanta, GA 30326

StressTester™ StressTester is a professional testing tool designed to quickly analyze the cost and usage of your software. StressTester runs tests in parallel, executes test scripts and includes embedded, context-driven video tutorials. Tests that would take weeks with other tools take days with StressTester, saving up to 70 percent off the annual testing budget. Including a wide range of built-in stress tests, StressTester can quickly identify performance-related issues for rapid problem remediation. It supports agile development and frequent, iterative testing.

telephone 617 592 2070
training available Yes
trial available No
address 275 Grove St.
Suite 240
Newton, MA 02466

LDRA LDRA is a COTS automated unit testing tool. The functionality within LDRA includes a GUI interface which automates the production of test data extracts by running the source code under test automatically. It also provides the test documentation and other reports. Automatic generation of test data extracts is supported by feedback for robustness, test scenarios, and support of black-box, white-box, and object box testing. www.ldra.com/training.asp jonathan.cathy@ldra.com

telephone 44 151 649 9500
training available Yes
trial available No
address 1000 Kingsgate, Merton Park
W13 0LH
United Kingdom

Microsoft Visual Studio 2010 Ultimate An integrated environment of tools for developer organizations that integrates application development process. Visual Studio 2010 Ultimate productivity by utilizing advanced collaboration features and uses integrated testing and debugging tools to find and fix bugs quickly and easily creating high quality solutions while keeping costs down. It includes support for mobile development, cloud and web development, and performance testing and virtual lab management capabilities to complete your application development needs. www.microsoft.com/visualstudio/2010/default.aspx

telephone 800 361 2779
training available Yes
trial available No
address One Microsoft Way
Redmond, WA 98052

telerik Telerik Test Studio is a point-and-click, automated testing tool that helps users build tests in minutes. The tool requires zero lines of code. Instead, customers can use smart wizards to quickly define their test requirements. Test maintenance is faster thanks to the employed web-element abstraction techniques. This allows for an easy transition between the test editor and the browser to add and edit tests. Furthermore, you can record and play your tests in IE, Safari, and Chrome at the same time. www.telerik.com/automated-testing-tools.aspx daniel.levy@telerik.com

Tools Matrix Guide

Development & Deployment

COLLABNET TeamForge TeamForge is an integrated suite of web-based development and collaboration tools for agile software development. It can manage teams, projects, processes, and assets. TeamForge increases productivity, and improves project visibility. TeamForge 3.4 features enhanced agile planning capabilities and support for personalization options. www.collab.net/elp/produces/007.html

telephone 601 228 2337
training available No
trial available No
address Suite 600
Brisbane, GA 34005

Twist Twist—Agile Testing Solution. Twist helps to operate new features, while ensuring all functionality testing and working exactly what the business wants. It ensures you can easily accommodate changes in requirements aligned to changing business needs. It empowers your team to collaboratively create robust, optimally-automated test suites that stay true to business priorities. Twist delivers on the promise of agile and is based on proven best practices from the world's top firms. www.thoughtworks-studios.com/twist studios@thoughtworks.com

telephone 512 392 5017
training available No
trial available No
address 1650 Montgomery St.
6th Floor
San Francisco, CA 94104

Userlytics Userlytics provides qualitative audiovisual feedback to help fine-tune your design and development process. Userlytics' remote usability testing solution enables designers, developers, and product owners to capture and analyze each tester's reactions to a user interface. Userlytics' remote testing solution allows you to precisely detect and resolve any issues. It takes only a few minutes to create a test and you can receive detailed, quantitative audiovisual-based results within twenty-four to forty-eight hours. www.userlytics.com/corporate-usability-solutions janet@userlytics.com

telephone 831 708 2385
training available No
trial available No
address 1660 S Amphlett Blvd.
San Mateo, CA 94402

Microsoft Visual Studio 2010 Professional An integrated environment of tools for developer organizations that integrates application development process. Visual Studio 2010 Professional productivity by utilizing advanced collaboration features and uses integrated testing and debugging tools to find and fix bugs quickly and easily creating high quality solutions while keeping costs down. It includes support for mobile development, cloud and web development, and performance testing and virtual lab management capabilities to complete your application development needs. www.microsoft.com/visualstudio/2010/default.aspx

telephone 800 361 2779
training available Yes
trial available No
address One Microsoft Way
Redmond, WA 98052

Telerik Test Studio This point-and-click, automated testing tool helps users build tests in minutes. The tool requires zero lines of code. Instead, customers can use smart wizards to quickly define their test requirements. Test maintenance is faster thanks to the employed web-element abstraction techniques. This allows for an easy transition between the test editor and the browser to add and edit tests. Furthermore, you can record and play your tests in IE, Safari, and Chrome at the same time. www.telerik.com/automated-testing-tools.aspx daniel.levy@telerik.com

Tools Matrix Guide

Development & Deployment

cathy clinger



2012 TOOLS & SERVICES GUIDE

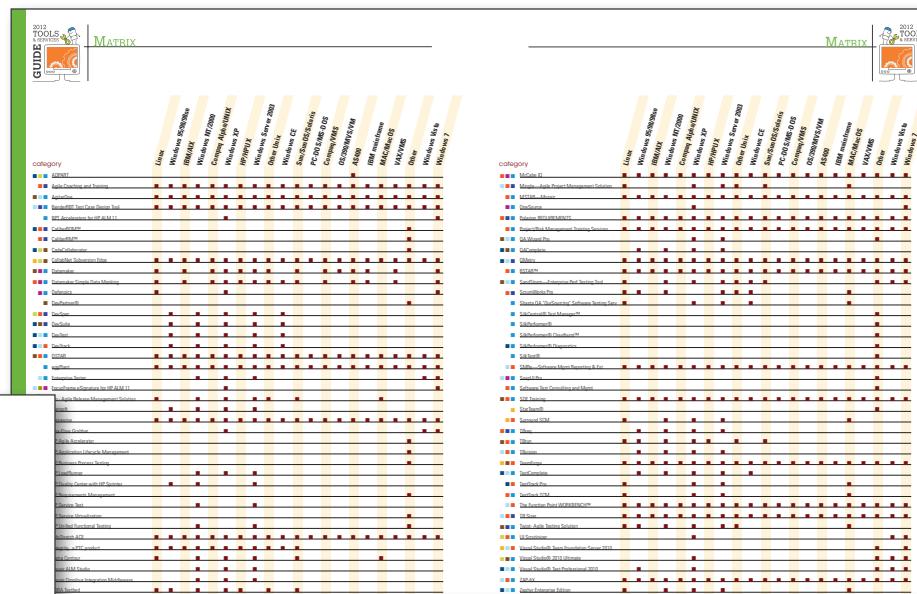
The 2012 Tools & Services Guide is a collection of sponsored tools that can help you work smarter and build better software. The information in this guide has been provided by the vendors and in no way implies endorsement by Better Software magazine, TechWell.com, StickyMinds.com or Software Quality Engineering.

Want to add your tool to our online community? Visit www.stickyminds.com/tools.asp



contents	matrix legend
CONFIGURATION MANAGEMENT	32
DEFECT TRACKING	33
DESIGN & ARCHITECTURE	37
DEVELOPMENT & DEPLOYMENT	39
MEASUREMENT & REPORTING	43
PROCESS & PROJECT MANAGEMENT	48
REQUIREMENTS	56
REVIEWS	61
SECURITY	61
TEST & EVALUATION	63

www.TechWell.com JANUARY/FEBRUARY 2012 BETTER SOFTWARE 1



2012 TOOLS & SERVICES GUIDE REQUIREMENTS

ScrumWorks Pro ScrumWorks Pro is an agile project and program management solution for teams of all sizes. It allows working in an iterative fashion manage their releases, sprints, and team tasks. ScrumWorks Pro's rich set of collaborative, forecasting and enhanced reporting capabilities help teams improve the quality of their products and reduce time-to-market for new developments. ScrumWorks is ideal for enterprises doing distributed development. For more information or a free trial visit www.open-codah.net/products/scrumworks/ [mailto: info@open-codah.net]	TBreq TBreq is a unique solution that can help development teams overcome the challenges of mapping test specifications, unit testing scenarios, test case and code coverage. TBreq provides a visual interface that supports an efficient reuse of requirements. TBreq interfaces directly with management tools such as IBM Rational® DOORS®, IBM Rational® Requirements, Microsoft Word documents or Excel spreadsheets, in order to ensure traceability across the organization. TBreq also provides a graphical view verifying the completeness of the requirements coverage. www.tbreq.com/tbreq.asp [mailto: jana@tbreq.com]
TR Sigma Mosaic, Inc. TR Sigma is a requirement repository and software sizing tool that supports an alternative sizing measure—feature requirements (TRs). TRs are an intuitive, flexible, easily implemented and powerful alternative to function points. TRs are based on the concept of a feature as a business value, which is measured by the number of requirements. TRs allow increased accountability for delivered work, more effective UVM and improved measurement of quality risk. Based on requirements, the TR measure also highlights and helps manage requirement risk. www.mosaicinc.com/trsigma/ [mailto: kphorn@mosaicinc.com]	LDRA LDRA is a unique solution that can help development teams overcome the challenges of mapping test specifications, unit testing scenarios, test case and code coverage. LDRA provides a visual interface that supports an efficient reuse of requirements. LDRA interfaces directly with management tools such as IBM Rational® DOORS®, IBM Rational® Requirements, Microsoft Word documents or Excel spreadsheets, in order to ensure traceability across the organization. LDRA also provides a graphical view verifying the completeness of the requirements coverage. www.ldra.com/trbres.asp [mailto: jana@ldra.com]
twist Agile Velocity Twist helps you rapidly test new features, while ensuring a baseline and helping you meet customer expectations. Twist makes it easy to accommodate even last minute changes easily and cost effectively. Tested software aligned to changing business needs. It empowers your team to collaboratively create robust, optimally integrated test cases, and provides the confidence that delivery is done in the promise of right, and is based on 18 years of proven testing innovation at ThoughtWorks. www.thoughtworks-studios.com/agile-test-automation&reference=70150000000HKS [mailto: judson@thoughtworks.com]	Mosaic Inc. TR Sigma is a requirement repository and software sizing tool that supports an alternative sizing measure—feature requirements (TRs). TRs are an intuitive, flexible, easily implemented and powerful alternative to function points. TRs are based on the concept of a feature as a business value, which is measured by the number of requirements. TRs allow increased accountability for delivered work, more effective UVM and improved measurement of quality risk. Based on requirements, the TR measure also highlights and helps manage requirement risk. www.mosaicinc.com/trsigma/ [mailto: kphorn@mosaicinc.com]
Software Quality Engineering Conferences assist professionals interested in improving software practices. Software Quality Engineering hosts three annual conference series—six events in all. It testing your specialty! STAREAST 2012, the premier software quality engineering event, will provide you with the latest research, education, and networking opportunities to learn how to better manage quality and compliance, exclusive access to solutions providers, and the chance to get up close and personal with industry experts. Maybe your interest lies in development lifecycle practices. If so, the Better Software Conference series provides the latest information on how to better manage your development process. The Agile Development Conference series focuses on investigating or implementing agile development practices, processes, technologies, and leadership principles. Attend one, or attend all. We have a conference to meet all of your needs. www.sqe.com/conferences	grid-tools Grid-Tools DATA FOR PURPOSE Grid-Tools is a complete data management solution with the ability to support high-quality, secure test data for purpose. Dataraker focuses on how core modules as part of a complete test data management strategy: database management, data generation, and data masking. Grid-Tools is designed to support the right kind of data for test and development. It adopts an agile approach by automating complicated processes and easily maintaining referential integrity across challenging environments www.grid-tools.com/testdatagen/index.php [mailto: jessica.jones@grid-tools.com]
grid-tools Grid-Tools DATA FOR PURPOSE Grid-Tools is a complete data management solution with the ability to support high-quality, secure test data for purpose. Dataraker focuses on how core modules as part of a complete test data management strategy: database management, data generation, and data masking. Grid-Tools is designed to support the right kind of data for test and development. It adopts an agile approach by automating complicated processes and easily maintaining referential integrity across challenging environments www.grid-tools.com/testdatagen/index.php [mailto: jessica.jones@grid-tools.com]	grid-tools Grid-Tools DATA FOR PURPOSE Grid-Tools is a complete data management solution with the ability to support high-quality, secure test data for purpose. Dataraker focuses on how core modules as part of a complete test data management strategy: database management, data generation, and data masking. Grid-Tools is designed to support the right kind of data for test and development. It adopts an agile approach by automating complicated processes and easily maintaining referential integrity across challenging environments www.grid-tools.com/testdatagen/index.php [mailto: jessica.jones@grid-tools.com]
Defensics Codenomicon Defensics is a software-based test solution that applies fuzzing techniques to discover potentially exploitable vulnerabilities from the system under test. It generates random test data for fuzzing, and performs a static analysis of the protocol models, which it then uses to generate test cases. Features: "Cross" graphical user interface (GUI) based console in the market "Fast test times" "Flexible, completely software-based solution that is easy to integrate" "The solution is built on the latest fuzzing technology" www.codenomicon.com/defensics/ [mailto: sakko@codenomicon.com]	grid-tools Grid-Tools DATA FOR PURPOSE Grid-Tools is a complete data management solution with the ability to support high-quality, secure test data for purpose. Dataraker focuses on how core modules as part of a complete test data management strategy: database management, data generation, and data masking. Grid-Tools is designed to support the right kind of data for test and development. It adopts an agile approach by automating complicated processes and easily maintaining referential integrity across challenging environments www.grid-tools.com/testdatagen/index.php [mailto: jessica.jones@grid-tools.com]

32 BETTER SOFTWARE JANUARY/FEBRUARY 2012 www.TechWell.com

JANUARY/FEBRUARY 2012 BETTER SOFTWARE 33

6 THINKING HATS for TESTERS
A Haberdashery of Testing Improvement
by Julian Harty

Over the past few years, I've been using some simple concepts that have helped improve my ability to deal with issues from multiple distinct viewpoints. I learned about these concepts from Edward de Bono's book, *Six Thinking Hats* [1]. I have applied his concepts to software development and software testing and found them to be both useful and practical. I believe many of you will benefit from using them, too.

Six Thinking Hats
The six thinking hats are a metaphor for six distinct viewpoints we may take when dealing with an issue. Each hat has a color or name, each hat has a color associated with it to make the hats easy to remember.

Blue Hat	Wear this hat to gather information
Yellow Hat	Use this hat to highlight positive facts and figures
Green Hat	Use this hat to explore options and ideas
Red Hat	Use this hat to express feelings and emotions
Black Hat	Use this hat to point out problems and negative aspects
White Hat	Use this hat to clarify the facts and figures

By itself, each thinking hat is about information. The information can range from hard facts and figures to things we believe but aren't necessarily true. We can also consider hand facts, such as "The CEO of our organization is a woman" or "We have two wedges of cheese in our sandwich". Or we can consider soft facts, such as "Jack is angry with the project team and blames the testers for holding up the release". In some cases, what we believe may be contradictory to us, so we decide to switch hats. This is when the hats are used.

Alternative JVM Languages for Java Projects
by Daniel Wellman

Bringing the World Spring Back...
SAP and Twitter are using those languages...
writer Javaconf once again...
the Java community is looking forward to...
rethink. Some days, life on a long-haul Java project can be repetitive and tiresome. Is there no sense in concept, or in...
language? There are several languages that run on the Java Virtual Machine (JVM), with each offering a...
reputation as being verbose...
most languages offer static type systems, and several languages that run on the Java Virtual Machine (JVM), with each offering a...
language? There are several languages that run on the Java Virtual Machine (JVM), with each offering a...
language? There are several languages that run on the Java Virtual Machine (JVM), with each offering a...
language? There are several languages that run on the Java Virtual Machine (JVM), with each offering a...

JRuby
Always On COFFEE

CLOJURE
Vacuum Packed
DRY ROASTED COFFEE

GROOVY
JAVA

THE KEY TO GOOD INTERVIEWING

ASK THE RIGHT QUESTIONS AND THE QUESTIONS RIGHT

by Robert Sabourin & Lee Copeland

www.StickyMinds.com OCTOBER 2010 • ACTON SCOTT

FOUR PATHS TO PREDICTABLE, REUSABLE, REPEATABLE, TEST DATA

by Linda Hayes

Despite the fact that test data is one of the most common challenges in software development, it is often one of the easiest to ignore. Most organizations have a copy of their test data in a single, isolated location, and they have no way of tracking its status or availability. This lack of visibility leads to inefficiencies and errors, which can result in costly delays and rework. To address this issue, we have developed a four-path approach to managing test data. This approach allows us to quickly identify and resolve issues related to test data, ensuring that it remains predictable, reusable, and repeatable.

Baseline
One approach to creating the ideal test environment is to start with a set of empty databases that are all loaded under strict control. My experience is that this is not effective. Gone are the days when we could simply copy a database and expect it to work. Now, we must take into account the fact that data is constantly changing. In addition to that, databases are complex repositories of procedures, pointers, and rules. Therefore, it is important to have a good understanding of the database structure before making changes.

Interface
The most common source of baseline test data is production data. That data represents the current state of the system, but it can be difficult to use effectively. If the test environment is refreshed every time there is a production database change, then the test environment becomes unstable.

Input
The best strategy is to create a copy of a subset of production data and then condition it to reflect the specific needs of the test environment. This can be done by filtering the data in the test database. Many laws and regulations require that names, addresses, social security numbers, account numbers, medical information—basically anything that can be a real problem if it gets into the wrong hands—be removed from the data. This typically requires scrubbing or obscuring protected fields.

Output
Once the test environment is set up, it is important to ensure that it is accurate and reliable. In most cases, production data is not the best choice, because it means you have to spend a lot of time and effort to keep it up-to-date.

Conclusion
Now, you must develop a strategy for aging the test data. This means keeping the same relative differences between any tested data and the actual data. This is important because many times, the test data is used to validate the production data, and any changes in the test data must be reflected in the production data. You must either change the test data back or off the stored data forward, otherwise, inaccurate results will be produced.

Final Thoughts
So, how do you keep your test data current? By applying changes to the data in small increments, you can ensure that the test data remains accurate and reliable. This is a valuable asset as it is continually adding new context that supports expanding test coverage.

Final Notes
Finally, establish an archive-and-reuse procedure to enable you to preserve and reuse old data for future tests. This will help you save time and resources, and it will also reduce the size of the next test suite, as testing can become expensive. For example, if an application fails, you are able to use the data in the post-system state and continue testing.

Interface
Most new systems operate mostly independently. Most other active data from or send data to other applications—some internal and some external. And if you have created test data for one production system, you have to keep synchronized any related data from those other systems.

MAKING LEMONADE: Leveraging a Learning Culture

by Lisa Crispin

There's one thing I know for sure: We should never stop learning. Even if we're an expert in our field, there's always room for improvement. Mistakes can happen. However, if we can learn from our mistakes, we can improve our processes and practices and avoid making similar mistakes in the future.

The Problem
When managers looked to place blame for mistakes and punished team members for problems, that resulted in a culture of fear and suspicion. Managers were afraid to admit their own mistakes, and team members were afraid to speak up. This is not the best way. When a defect is found in production, we don't waste time pointing fingers. We review the defect, fix it, and try something new to improve future development. What follows is a recent learning opportunity we experienced.

A Bit of Background
In our last issue, one of the operations managers discovered a high-error bug. One of our systems reported deployed an incorrect configuration file for a critical component. This file caused the system to fail. I was asked to review the bug, and while it wasn't critical, the code was different from production, giving me some insight. This was frustrating, as we had to analyze the code and determine what was causing the error. We worked on teams to identify the cause and fix the bug. This was a great opportunity for our team to learn from each other and improve under the rug with no possibility for improvement.

The Solution
Our team was able to implement a continuous management that gave us time to evaluate, research, and continually learn to do better work. When a defect is found in production, we don't waste time pointing fingers. We review the defect, fix it, and try something new to improve future development. What follows is a recent learning opportunity we experienced.

More Investigation
After the bug was fixed, the programmer tasked with production support did more research. He had the logic to decide what code to include in the deployment. He found that the code was different from the code in production. This explained the lack of automated regression tests—it would be impossible to test without using the database and, therefore, the code. It would be costly to write a new one.

Final Notes
Wow, what a difference! "Old" and "new" sides of the view. A return to production with the new code, and everything worked as expected. However, the schema were using as test and not ready for the live version. This was a big mistake, as it caused a lot of documentation about this subsection in our main schemas, so had to make any notes about why we decided not to automate this for this part of the code. I was pleased.

Final Thought
For lesson learned: Make sure your test environment truly is a duplicate of the production environment. This includes the database, schema, and all of your source code controls, but views, stored procedures, and DDL. Comparisons of our Oracle schemas are nice. This bug showed how much we had to learn about how to handle test environments and how to use them in the process of receiving this bug.

Final Notes
Finally, we had to make this new version of the view was created, what it was meant to be. There was no record of the change in the spreadsheet of the schema. The schema was still using the old one. We had to manually edit the SQL code, find a related bug report, and we found nothing on the schema about it. This is why everything needs to be well-documented. So, learning comes up for having done what's going to move us forward.



AIM

Using Tracer Bullet Software Development to Hit Your Product Target
BY JARED RICHARDSON

26 BETTER SOFTWARE MARCH/April 2009 www.StickyMinds.com

Agile Planning and Analysis Synergizing to Deliver Value
by Ellen Gottesdiener and Mary Gorman

Agile is about the continuous incremental delivery of valuable, market-ready software. While many organizations have adopted agile, most continue to struggle with how to manage product backlog items—commonly referred to as requirements by planners—and translating what to build, defining acceptance criteria, and then getting the increments. A crucial aspect of work in planning—and planning in work—is analysis.

Planning and planning are synergistic. They are coordinated efforts, and one feeds the other. Analyzing requirements designs your backlog of product needs and then shapes the way you plan the backlog. Planning is the allocation of those product needs into delivery cycles, giving you the ability to analyze needs to prioritize, gather, planing and analyze to maximize business value.

The Backlog: The Basis for Planning and Analysis

The backlog is a master catalog containing a prioritized list of unfinished products or varying levels of granularity. Figure 1 shows one way of categorizing backlog items.

To lead the backlog, you must understand the requirements in various formats: user stories, use cases or user interface prototypes. To support the backlog, healthy agile backlog management (what Roman Pichler calls DEEP backlog management) is required.

Note that "details appropriately" means that, at any given moment, some items will be highly detailed and others less so. The backlog is a living document that is refined, reorganized, deferred, decomposed, or prepared as needed. The backlog is a dynamic document that is refined as it is known as prioritizing, pruning, or refining the backlog. An item in the backlog is a placeholder for a feature. The backlog items align with the product's vision and business goals, resulting that goals may change over time as the organization's needs change.

Consistent maintenance of a running backlog that are ready to pull into planning for the next and future delivery cycle is critical. As the backlog grows, you will find that teams typically work two to four iterations ahead; the further ahead you're planning, the less detailed the requirements will be.

Planning and analysis get increasingly fine-grained as you descend the view hierarchy. The higher up you move in

Figure 1. Product backlog categories

Product Requirements	Infrastructure	Housekeeping	Product Packaging
----------------------	----------------	--------------	-------------------

Product needs, including perspectives from cross-functional disciplines. The team needs to incorporate the input of the business, IT, and other stakeholders.

To lead the exploration and analysis, many agile teams rely on a few people who have strong analysis and domain knowledge. These people are called analysts. They help build new analysis, product managers, testers, user experience experts, and more.

The Three Views of Product Needs: Plan and Analyze the Backlog

As you pull and evaluate items from your backlog, the last question is, "How much more work do we have to do?" Depending on the amount of lead time or your planning, the answer to this question may be very different than it should be. You can't know all the details of all the backlog items until you've analyzed them. You also need to be able to establish a common focus and marshal organizational resources (people, money, space, governance). Thus, you iterate through the backlog to refine the backlog and to establish a shared understanding of the backlog among all those views the backlog—the pre-views, the mid-views, and the post-views.

Planning and analysis get increasingly fine-grained as you descend the view hierarchy. The higher up you move in

What to Expect When You're Automating Testing
Test-last Tips from an Agile Expert
BY DANIEL WELLMAN

28 BETTER SOFTWARE MARCH/April 2009 www.StickyMinds.com

C **congratulations**, you've decided to start writing automated tests for your application. Maybe this is a new requirement for your team, maybe you've been burned by bugs that keep reappearing, or maybe you were just curious about the buzz surrounding automated testing. However you got to this point, a great suite of automated tests makes your development life more productive and peaceful.

If you are a developer, perhaps you've read an introductory article on testing with Unit Testing, Test Driven, or Behavior-Driven Development (BDD) frameworks, or you understand the syntax and fundamentals of writing tests. But going from test-driving a stack data structure (a typical task) to writing unit tests for your complex production application can seem like a daunting challenge. In this article, I'll suggest what to start testing in your application, how to get started, and some problems you may encounter along the way.

It's important to note that automated tests can be practiced in any software process or methodology, whether it's Scrum, waterfall, RUP, Extreme Programming (XP), or your organization's own unique approach. Writing automated tests before the production code, this practice can be difficult to start. Test-last development—testing after the production code is written—is a way that many teams start and practice automated testing.

www.StickyMinds.com MARCH/April 2009 BETTER SOFTWARE 29

Device Support

While device support may be the bane of a project manager's existence, it affects you, too. If you're a developer, you've probably experienced it firsthand. It's not fun to wait out there. It is vital to have a strategy to manage this, so you don't end up in a situation where it's impossible to meet your goals.

Like popular mobile platforms such as, for example, Apple iOS, Android, BlackBerry, Windows Phone 7, Symbian, Maemo, and Bada, just to name a few. Within these platforms, there are multiple hardware manufacturers and multiple software providers. There are multiple firmware versions. Also, since a smartphone is a communication device, it needs to support multiple communication protocols. If yours is a client-server application—i.e., it needs to communicate in a remote server to operate—then it needs to support multiple communication protocols and multiple communication protocols. Now, imagine a blazer product strategy like we see for computers: "We'll support iOS version 3 and up" or "We'll support Windows Phone 7, 2010, there are three versions of the OS, and we'll support them all." That's a lot of work. And, as you can see above—platforms, hardware, firmware, carrier, network, and security—you are looking at a massive amount of complexity. So, how do you manage this? You have to consider with a non-mobile platform.

In some cases, different hardware versions will be a big operating system roll-up upgrades to users, and we don't really pay attention to hardware that much. But in mobile, the devices are smaller and less powerful than computers, which can have an impact on how your application performs. So, you have to take into account the fact that the impact on how your app operates, particularly if you're paying attention to memory and disk access, is going to be much more significant.

In some cases, different hardware versions will be a big operating system roll-up upgrades to users, and we don't really pay attention to hardware that much. But in mobile, the devices are smaller and less powerful than computers, which can have an impact on how your application performs. So, you have to take into account the fact that the impact on how your app operates, particularly if you're paying attention to memory and disk access, is going to be much more significant.

Upgrading mobile devices to newer versions down to devices, as back-end compatibility is difficult to maintain without a way to store and update multiple versions in the test lab. There are a lot of updates to keep track of if you were to use a blaster automation tool to do this. You would have to have a lot of different configurations for each of the mobile models, we don't all have mobile devices to use. Furthermore, we don't have a way to support all of the different mobile devices. For example, if you were to work with a telecommunications company, often with separate data planes, just to have a device that will work the way it will be used. Based on what your competitor has decided their target platform is, you have to make sure that your application can support that and can pass your customers use and what technology will be used for data transfer, and you'll

www.TechWell.com JANUARY/FEBRUARY 2012 BETTER SOFTWARE 29

IN THE TRENCHES		
<p>CALLING ALL READERS... democracy at large is a new magazine produced by FES designed for professionals interested in democracy development worldwide. The magazine aims to inform the debate about democracy aid and foster dialogue between practitioners, academics and government stakeholders. In this way, we will bring the expertise of theorists and practitioners—Tariq Ali and David Taitz, among others—together for the benefit of both groups as well as that of the public. <i>Electors Today</i>, our magazine for election administrators around the world, will continue as a stand-alone supplement publication of democracy at large.</p> <p>We uphold democracy as the preferred form of government. However, we recognize that its practice often will conflict with the values of democracy at large and the place of democracy in the world. The magazine's independent Advisory Editorial Board illustrates this belief. To make Democracy at Large work, a normative consensus is necessary, or a pluralism of democratic and non-democratic contributions. When it comes to democracy, no "exceptionalism" should be acceptable.</p> <p>In this issue, we invite you, the reader, to share this issue to let us know what you think. What is working? What is not? What should be revised and what new ideas just might make things better? Did a Fieldwork author's experience run contrary to yours? Does Democracy at Large writer's analysis ignore important issues? Do you have an important dialogue to send your thoughts and critique via "Letters to the Editor" to editor@democracyatlarge.org or by post to Editor-in-Chief, Democracy at Large, 1101 19th St., NW, Third Floor, Washington, D.C. 20036? Please submit no more than 300 words, and only those writers whose letters are printed will be contacted by magazine staff.</p> <p>The Editors</p> <p><i>democracy at large</i></p>		

IDEAS IN PLAY

THINKING OUT LOUD

Resources for the Professional

Job Listings

- DevZone: www.dev-zone.org/jobs
- Foreign Policy Association, Job Board: www.fpa.org
- International Career Employment Weekly: www.internationaljobs.org/hotjobs.html
- DevNetJobs.org: www.devnetjobs.org
- Action Without Borders: www.cdeadlist.org

DEMOCRACY & CULTURE

VOTE The Smithsonian Institution's traveling exhibition "VOTE: The Machinery of Democracy" continues its exhibit on "Vote: The Machinery of Democracy," through January 30, 2005, at the National Museum of American History. Admission is free. www.americanhistory.si.edu/vote

UPCOMING EVENTS

GANG & GOVERNANCE: WARRIOR IN ASIA'S FUTURE Wednesday, November 10, 2004, 12:00-2:00 p.m. Woodrow Wilson Center for International Scholars.

Oliver Roy, Research Director, French National Center for Scientific Research; Bruce Riedel, Barnett Rubin, Director of Studies/Senior Fellow, Center on International Cooperation, New York University; Radu Saroski, Resident Fellow and Executive Director of the New Atlantic Initiative, American Enterprise Institute; Michael A. Ledeen, Moderator; Ambassador Peter Tompa, former United States Special Envoy on Afghanistan.

How the European Union Sees That Democracy Doesn't Work (And Not Just in Europe) Thursday, November 18, 2004, 12:00-1:30 p.m. International Center for Law and Justice, University. Craig Parsons, Assistant Professor of Political Science, University of Oregon.

Part of the "Europe & Democracy" Series sponsored by Georgetown's Center for Democracy and the Third Sector.

POLITICAL PARTICIPATION IN YEMEN Monday, November 15, 2004, 12:00-1:00 p.m. Woodrow Wilson Center for International Scholars. Hiba El-Shatti, Regional Program Director, The

IDEAS IN PLAY

THINKING OUT LOUD

Can Islamists BE Democrats?

Islamist groups—or those who want to build a political society based on Islamic law—present democracy promoters with a real challenge. Three authors investigate the historical forces that have shaped the political ambitions of Islamist groups in Turkey, North Africa and Indonesia.

Turkey's Delicate Dance

by Gareth Jenkins

Task Force for Dialogue with the Islamic World

- ORIGIN:** Credited by the German Foreign Ministry as having been founded in 2002.
- PRIMARY GOAL:** To better understand the causes of terrorism and to identify ways to improve relations with the Islamic world. It also aims to promote greater cooperation with the Islamic world.
- PROJECTS FUNDED:** Any initiative that strengthens civil society in Islamic countries.
- CHALLENGES FACED:** The Task Force aims to use society's associative life and other activities to forge ties with Muslim communities. It has been accused of being funded by Middle East oil-rich countries.
- FUNDING:** 5.1 million Euros in 2003 (25% from Germany and 75% goes to education).

Former Research

The German Foreign Office: www.auswaertiges-amt.de

democracy at large

NEWS, ANALYSIS & DEBATE

Vol. 1, No. 1 – 2004

democracy at large

ISLAM & democracy

IN THIS ISSUE

Democracy and Development

Donors Seek Keys to Reform

These days national aid agencies around the world are pouring money into the Middle East in hopes of democratizing it. But everyone is still looking for the keys to reform.

IRAQ'S COMING ELECTIONS

BONUS SECTION

Elections Today

84-95 US\$

cluded that, far from threatening their values, Turkish membership in the European Union would not only result in an easing of the Kemalist suppression of Islamic piety in the public sphere but also, through the European Union's subordination of the military to civilian control, would make it impossible for them to be forced from power by the Turkish military.

Perhaps more significantly, Kemalism has not only served as an ideological framework against the perceived threat of Islam to the public sphere but has imposed a sense of a parliamentary system upon the Turkish people. Unlike other Muslim countries—which tend to be ruled by authoritarian regimes and whose constitutions mostly include Islam as a defining characteristic of the state—Turkey's model of government includes the separation of religion and state and is functioning, if imperfect, democratic system. The result of Ataturk's goal of emulating the West is that the Turkish model is nontransferable. However, it is also true that, even if the secularism of the Turkish model is dominant by the West and serving its interests, in its essential political nature it is not democratic. Yet there is little doubt that their long-term agenda is relatively moderate. Even relatively hard-liners admit that, despite their reservations about integration with the West, they recognize the practical need to be able to cohabit with Europe and the United States.

Perhaps more significantly, Kemalism has not only served as an ideological framework against the perceived threat of Islam to the public sphere but has imposed a sense of a parliamentary system upon the Turkish people. Unlike other Muslim countries—which tend to be ruled by authoritarian regimes and whose constitutions mostly include Islam as a defining characteristic of the state—Turkey's model of government includes the separation of religion and state and is functioning, if imperfect, democratic system. The result of Ataturk's goal of emulating the West is that the Turkish model is nontransferable. However, it is also true that, even if the secularism of the Turkish model is dominant by the West and serving its interests, in its essential political nature it is not democratic. Yet there is little doubt that their long-term agenda is relatively moderate. Even relatively hard-liners admit that, despite their reservations about integration with the

Turkish Prime Minister Tayyip Erdogan stands in front of a portrait of Mustafa Kemal Ataturk.

Vol. 1, No. 1 – 2004

904.347.7339, tel. | catherinejclinger@gmail.com

MAGAZINE DESIGN

<p>IDEAS IN PLAY</p> <p>THINKING OUT LOUD</p> <p>Was it worth the fight?</p> <p>A scholar of the post-communist transition evaluates the state of democratization in Central and Eastern Europe 15 years after the end of communism.</p> <p>by Vladimir Tismaneanu</p> <p>Fifteen years ago, who could have imagined that countries belonging to the Warsaw Pact would become NATO members? Who could have dreamed that these countries would join the European Union? And these things have happened as a result of the events that led to the collapse of Leninist regimes in Central and Eastern Europe in 1989 and the demise of the USSR in 1991. The following years of post-communist transition were marked by high expectations and noble dreams of justice, equality and freedom—as well as anxiety, disappointments, and fear behind the Iron Curtain. One region of democratic transition, one that I call the "Revolution" area, in Romania in particular, has been mixed, but has constituted robust institutions. Other areas, such as Bulgaria, have been mixed, too, but have not constituted robust institutions. One can say that whatever the post-communist transition has achieved, unanimity and firm support for democracy has been missing. Their leaders have replaced the leadership of self-guards. Entropy has taken over these countries. The role of law, civil society and Western-style institutions has been limited. In some countries, while pluralist values were exalted early on during the transition, collectivist fantasies and frequent outbursts of xenophobic intolerance (anti-Semitism, anti-Roma, anti-minorities in general) have unfortunately followed.</p> <p>Post-communist societies undergoing transition have also been plagued by the familiar challenges of graft, cynicism and loss of citizen momentum. Privatization, initially seen as a magic solution to all economic hardship, was too often used as a smoke screen by new (and not-so-</p> <p>perfectly) and is now intertwined with the everyday life of these societies. While in some countries, liberal parties have moved worryingly toward populism, nationalism and movementism, which threatened some democracies in the early 1990s—seems to have subsisted. For the most part, the new democracies of the post-communist transition have managed to contain illiberal movements and forces—although recently the latter have resurfaced in opposition to membership with the European Union (e.g., the "self-defense" movement in Poland).</p> <p>Pluralism. In some countries, while pluralist values were exalted early on during the transition, collectivist fantasies and frequent outbursts of xenophobic intolerance (anti-Semitism, anti-Roma, anti-minorities in general) have unfortunately followed.</p> <p>Many scholars and journalists point to allegedly "civilizing" fault lines to explain the differences in these two types of democratic transition. In each case, they link the nature of transition to historical legacies, cultural factors and institutional memories. To illustrate, Central European epochs with its Hungarian legacy of the rule of law, civil society and Western-style institutions (such as parliaments), is often contrasted with the Balkans, which had fewer constraints on power and less social and economic disparities have also played a critical role in undermining consolidation. These living in significantly poorer economic circumstances now (as compared to 15 years ago) might argue that the empty idealism of communism was in fact replaced by the sordid materialism of naked self-interest, or, more ominously, by populist demagogery. Was it worth the fight?</p> <p>I must answer yes. The simple fact that such issues are now freely debated in all formerly communist societies is the most convincing argument for a positive assessment of the post-communist era since 1989. Whatever the ugly features of what Vaclav Havel once diagnosed as the post-communist syndrome, one thing is certain: the times of regular uncertainty and forced acceptance of the Communist Party-dictated concept of human happiness are over.</p> <p>Dr. Vladimir Tismaneanu is professor of politics at the University of Maryland-College Park and author of numerous books, including <i>Stalinism for All Seasons: A Political History of Romanian Communism</i> (University of California Press, 2003).</p>	<p>IDEAS IN PLAY</p> <p>THINKING OUT LOUD</p> <p>DEMOCRACY WATCH</p> <p>EF 巴快社 新闻集锦 En Brief Панорама</p> <p>19 received praise for condemning terrorism and WMDs. Amnesty International and Human Rights Watch reported that Libya continues to violate basic human rights. In December, the UN issued a travel ban and grant visas to a Human Rights Watch research team, after they were denied entry to Libya. Sarah Leah Whitson, Libya still bars free media and independent political parties.</p> <p>MALAYSIA In December 2005, East Asian leaders led by Malaysian Prime Minister Abdullah Badawi, will meet in Kuala Lumpur for a summit of the Association of Southeast Asian Nations (ASAN). Badawi argues will move member states towards greater regional integration and provide for free trade, monetary and financial cooperation, joint development programs, a declaration of human rights and obligations, and a communication network. The summit will be attended by 10 ASIAN members plus China, India, Australia and New Zealand. Australia has been excluded. According to Badawi, the summit will be the first to be held in the northern hemisphere. In a statement passed by hundreds of heads of state, particularly angered by the US invasion of Iraq, Goodwill resolution, Article 35, argued that long-term peace and stability. But even so the resolution did not receive a vote. The Ivory Coast is a residential election in 2005, but these are in question.</p> <p>PALESTINE On January 9, Palestinians voted in their first election for the first time since 1996, electing Mahmoud Abbas with 62.3% of the vote. The election was little tough competition, hoped the election would provide him with a mandate to implement internal reforms and negotiate with Israel. Voter turnout was estimated at 70%. Those living abroad or in exile were not permitted to vote. Radical Islamic groups such as Hamas urged a boycott of the election, but it was clear that they would work with the elected president. Shortly after the election, Israeli Prime Minister Ariel Sharon called Abbas to congratulate him. The two leaders have had little contact between them and Palestinians in years.</p> <p>ROMANIA In December, President Hugo Chavez signed a law prohibiting the president from being seen in violence in the media and to ban reports that "endanger national security." The law aims to end a series of economic and social reforms, pledging to fight corruption, improve press freedom and strengthen the rule of law. The law came just after Chavez had charged those responsible for the assassination of Pedro Camacho with "civil rebellion." (Camacho took office following the 2002 coup that briefly removed Chavez from power.) Under Venezuelan law, people accused of treason are not entitled to parole, and therefore the government can hold them indefinitely. Defense and human rights groups around the world have spoken out against both the new law and new constitutional coalition.</p>
<p>democracy at large</p> <p>IN THIS ISSUE Fifteen years into transition, political corruption is one of the biggest obstacles facing further democratization in post-communist states. PLUS Civic Journalism in Central Asia Post-Communism's Next Generation BONUS SECTION Elections Today</p> <p>\$4.95 USD</p>	<p>Vol. 1, No. 2 - 2005</p>