

## SpectrumSCM – Process Centric Source Code Management built from the ground up for excellence!

by Bob Aiello

SpectrumSCM has an excellent issue based approach to Source Code Management that includes a well designed and integrated software development lifecycle that is easy to customize for your needs and requirements. I originally reviewed this product in 2004 and was impressed back then with its task and life-cycle based, Change Request (CR) centric approach to full lifecycle based source code management. Back then, I also expressed a few concerns in regards to training and the process requirements necessary to successfully use this product successfully. It's been exciting to see this SpectrumSCM mature and take its place among the few enterprise ready source code management tools. Read on for an update on SpectrumSCM's new features and growth over the last few years. These last few years which have seen an explosive demand for world-class SCM and process-support tools, SpectrumSCM does not disappoint.

### Built from the ground up for seamless integration

Many tools suites are based upon one or more separate products, developed by different companies, and then "integrated" after-the-fact - using various hooks - so that the product can be marketed under a common label. Fortunately, this isn't the case with SpectrumSCM, which is written in 100% Java with a consistent look and feel that can only be achieved when products are properly designed and developed as a single integrated suite. SpectrumSCM is way ahead of other, more popular, SCM tools because it is designed and built with a consistent and integrated architecture. That means that users enjoy a delightfully integrated look and feel across all of its supported platforms including Microsoft Windows, Linux, Unix (e.g. Solaris, AIX, HP-UX), AppleMac, OpenVMS, and IBM OS/400. SpectrumSCM uses a database (included and managed automatically by the product) to support the source code repository and workflow functions while guaranteeing transactional integrity. The product requires minimal administration and does not require downtime for backups and administration. The GUI based interfaces are well designed and the product also supports a command line interface (CLI) and an API for advanced custom functions.

### FastTrack to effective SCM

Unwrapping and loading SpectrumSCM was an especially fun task because of the ease of getting started that was a huge improvement over the last time that I reviewed this excellent product. Most powerful SCM tools require a significant learning curve including training and implementation support. However, SpectrumSCM surprised me with its Project Setup Wizard which guided me through the required tasks of Naming the Project, Creating a main branch and selecting my desired project lifecycle (you can design Agile or Waterfall lifecycles and allow projects to pick the best fit for their needs). I followed the wizard and was up and running in about 10 minutes. The company does offer onsite and public classes, but reports that most users are able to master the tool with only a day or two of training. I believe this

**Bob Aiello** is the Editor-in-Chief for the CM Journal and an independent consultant specializing in Software Process Improvement including Software Configuration and Release Management. Mr. Aiello has over 25 years experience as a technical manager in several top NYC Financial Services firms where he had company-wide responsibility for CM, often providing hands-on technical support for enterprise Source Code Management tools, SOX/



Cobit compliance, build engineering, continuous integration and automated application deployment. Bob is a long standing member of the Steering Committee of the NYC Software Process Improvement Network (CitySPIN), where he serves as the chair of the CM SIG. Mr. Aiello holds a Masters in Industrial Psychology from NYU and a B.S. in Computer Science and Math from Hofstra University. You may contact Mr. Aiello at [raiello@acm.org](mailto:raiello@acm.org) or link with him at <http://www.linkedin.com/in/bobaiello>

to be an accurate estimate based upon the clarity with which the user interface indicates what needs to be done at each step of the process.

Here is what one customer, a principal engineer, at Oshkosh Corporation, a leading manufacturer and marketer of specialty vehicles and bodies reporting in four primary business groups: Access Equipment, Defense, Fire & Emergency and Commercial, told me about his companies' experience, "A little over four years ago when I started at Oshkosh Corporation, they were primarily using MS Visual Source Safe for version control and had no software change management solution in place. My previous experience had shown me the benefit of an integrated version control and change management solution. It was easy to convince management that we needed something better, but finding an integrated solution was not as easy as I had expected. We had SpectrumSCM working in just a few hours, and began updating our software processes around its capabilities. As the scope of the project management processes have grown, including becoming a CMMI level 3 organization, SpectrumSCM has been able to keep up. About a year and a half ago, we added a web-based software peer review utility into our environment and wrote Java middle-ware to connect it with SpectrumSCM. We did require some custom interfaces to best accomplish this, and worked with Spectrum Software to have them add some new features for us. SpectrumSCM was a great investment for my company and I have recommended it to many of colleagues."

## Role Based

SpectrumSCM allows you to design role based workflows, using a graphical workflow editor, that allows for establishing effective and flexible software development processes. These can include support for project management (PMO), Development (e.g. requirements tracking), Development, QA (e.g. approvals), Release Management (e.g. staging and release to production).

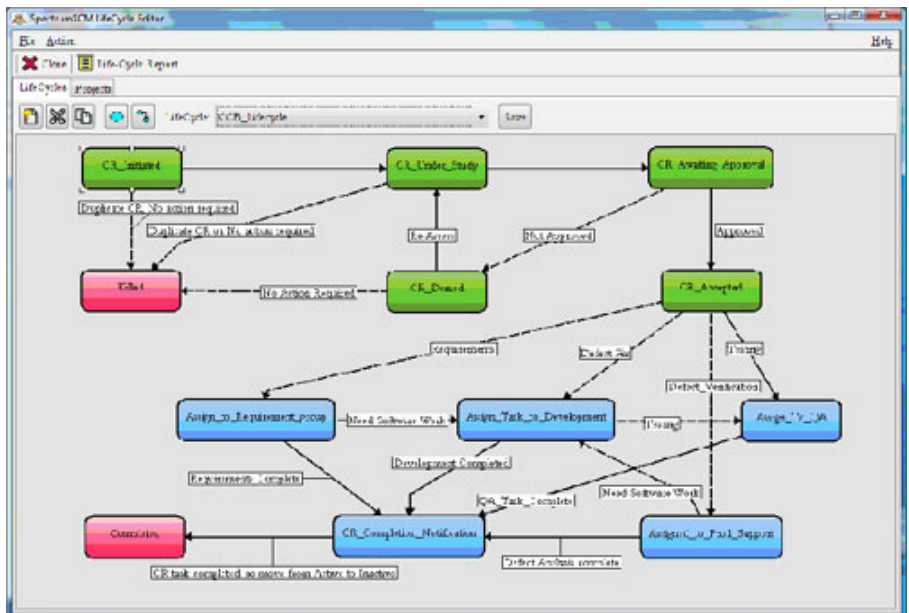
Users or their representatives can open CRs and enjoy reports and metrics to follow the entire lifecycle of the project. Spectrum SCM supports the entire Application Lifecycle by allowing it to be viewed and managed from each role within the development team.

## Processes and automated workflow

Process Improvement often fails because developers and project managers fail to enforce the processes that they had originally agreed to when the project was started. It is common for projects to have significant loss of productivity and quality because short-cuts skip agreed upon steps in the development process that are essential to effective software development. The only way to make process improvement persist is to implement an effective and flexible automated workflow tool. SpectrumSCM has its own integrated workflow tool and makes following the SDLC processes an implicit requirement. The product also allows you to customize your processes and easily monitor their compliance. This is an essential requirement for any process improvement effort.

## Compliance

Configuration Management has gotten a tremendous amount of attention these days as companies realize that IT Controls must be in place in order for any organization to pass audit requirements including the Sarbanes-Oxley Act of 2002 (SOX). Many companies also must demonstrate that they are at least CMMI level 2/3 in order to successfully bid on government contracts. SpectrumSCM has many of the features needed to help companies meet these IT Governance and compliance requirements. Compliance is a very hot topic these days and SpectrumSCM's ability to trace a CRs from inception to release promotion to production is an essential requirement in any corporate or government environment. SpectrumSCM has excellent support for change tracking.





User functions have been improved including disabling (but maintaining history of) users and renaming user-ids, while maintaining full traceability of all CRs.

New report features include extending hyperlinks to activate/show CR attachments directly from reports and a new UI element allowing multiple choice (checkboxCombo) to allow selection of multiple list elements.

## Conclusion

SpectrumSCM is a great Source Code Management tool that provides a complete CR/Task based lifecycle usage model. The focus on a complete lifecycle and Change/Issue centric SCM lifecycle sets this product apart from many of its competitors. SpectrumSCM is appropriate for small projects or large scale enterprise applications. If you are ready to manage your SCM activities and processes in a complete and effective way then you should download SpectrumSCM for your personal evaluation!

## SpectrumSCM Pricing:

SpectrumSCM offers the best combination of value and functionality and is very cost effective for all sizes of users. In fact the tool is very affordable for small teams, mid size team or enterprise level users.

SpectrumSCM licenses are always provided as "floating (concurrent) user" licenses, not "named user". Client licenses start at \$800 per floating license to \$400 per floating license for larger volumes. The SpectrumSCM Server license is \$1,500 per license. Unlimited Site License option is available as well.

## Company Contact:

Spectrum Software Inc.  
5400 Laurel Springs Parkway  
Suite 1004  
Suwanee, GA 30024  
Phone: +1 (770) 448-8662

email: [sales@spectrumsdm.com](mailto:sales@spectrumsdm.com)

website: [www.spectrumsdm.com](http://www.spectrumsdm.com)



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## Company Contact:

CMC Media, Inc.  
3905 State St. 7-235  
Santa Barbara, CA, 93105  
Tel: +1 (805) 683-1200