

Source Configuration Management Tools - A Guaranteed Way to Reduce Costs While Improving Quality & Productivity

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With the current economic slowdown all businesses have to be very conscious of cost centers in their operation, particularly those that are open to be optimized. Especially amongst IT organizations, the pressure to reduce costs and stay competitive without sacrificing quality is becoming an inevitable challenge and an important strategy which every CEO and IT manager is trying not only to sustain but would like to make it an art. It has become evident and important for IT managers to expect and use broad applications of Product life-cycle management, issue tracking and source configuration management (SCM) tools to assist in dealing with and overcoming these challenges. More and more organizations are saying it is not a question of Why SCM? But why not SCM? It is not surprising that SCM tools are becoming more widely accepted and used in industry. Configuration Management has become the key to managing and controlling the highly complex software projects being developed today, especially when there is a need for systems capable of managing developments involving large teams operating at multiple sites around the world.

What is **SCM**? SCM is a set of activities that has been developed, to manage change throughout the product life cycle. Modern SCM systems not only control and document all items under development; they also manage the process that is used to engineer these items and the process that controls the changes to them. Not all SCM tools support these functions; not all projects require this much functionality. Thus, it is important to identify from these descriptions what you need before beginning your search for an SCM tool.

Despite budget cutbacks, Source Configuration Management (SCM) tools remain on evaluation and buy lists of IT managers. The true savings can only be realized by implementing a true quality driven solution.

The Market Drivers

Managing software development becomes more difficult the larger and more complex the application under development becomes. Increasing complexities of computer systems, increasing use of complex development technologies and use of heterogeneous platforms to develop applications, increasing pressure on time-to-market, leading to larger team sizes, acquisitions, mergers and de-mergers requiring new systems and changes to legacy systems, increasing use of internet and intranet capabilities to undertake software development, will create a crisis point and this creates a need for Configuration Management.

Benefits of integrated SCM tools

Implementing and using the appropriate SCM tool can actually make the job easier and bring several tangible benefits to your organization.

Traditionally many organizations small, medium and large hesitate to buy SCM tools because they are either very expensive hence not affordable, or complicated and awkward to maintain. Otherwise they end up buying low-end tools that you have to buy in pieces of functionality and often have integration problems.

Managing where your business issues are in your development life cycle and to whom they are assigned, are key tasks that are generally managed by old-fashioned pen-and-paper techniques or maybe even a "high-tech" spreadsheet. The task of being able to quickly and easily produce old versions of documents, web pages or software, or guarantee that the version that you have is the latest and greatest. Both of the above are major issues that if optimized can save significant time and resources - and therefore money.

By addressing these issues with an integrated software solution, simple click-to-display reports show the real-time updated status of your issues. Workers can progress tasks once they have been completed,

immediately notifying all interested parties of the new status. The Internet and web enabling of such solutions allows workers to manage issues or development tasks anywhere anytime. That is, if you have a business critical issue arise where the critical person needed to resolve that issue is offsite, the resolution should not have to wait. Waiting costs money and might even loose you that customer through dissatisfaction. Internet enabling should mean that plugging in your URL into a web browser allows you resolve ALL of your issue tracking and configuration management needs.

Fully integrated (preferably designed in from the beginning as opposed to a bolt-on/marketing integration) issue tracking, version control, process, life cycle and release management are essential to facilitate the required cost savings. If you need to evaluate the risks associated with a customer demanded fix or enhancement you need to have all the relevant information quickly and easily available at hand, just a click or two away. What changed, why did it change, what level of research was performed before the source was modified, and what level of testing has subsequently been performed? The costs associated with putting out the wrong version or an incorrectly fixed version are much higher than those associated with getting it right in the first place, and that is not including the customer dissatisfaction.

There are many other benefits associated with a CM-enabled environment. Whether you are producing commercial or customized software applications or developing and maintaining in-house software systems, without CM, your organization will not be in a position to meet the increasing competitive demands of the market place.

If you are still not convinced, try the following exercise

Think back over the last few releases or projects, and list the incidents that can be attributed to a failure of effective CM. Remember, the following feeble excuses are really CM failures.

- We did not test it
- We forgot that one
- It would not build because ...
- Nobody told us
- The customer wanted an interim release immediately
- We could not find all the files
- The previous versions of the file were missing.
- I had to make the release without testing

Now put a price on each incident, either in terms of the real-time cost, the problems it caused and the unhappiness of the customer. How does it add up?

This is the cost of not having configuration management! ♦

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