Cost Benefits and Migration Strategies for MyEclipse Blue: Secure Edition™

A White Paper that explores business value of using MyEclipse Blue: Secure EditionTM as a low-cost alternative to IBM Rational Application Developer[®], and how it combats "diseconomies of scale" by assisting enterprises in managing, distributing and locking-down developer tools stacks. All without sacrificing legacy projects.

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"MyEclipse Blue makes me very happy... RAD doesn't even compare here. It's a waaaay too heavy, slow and overly-complicated IDE. - IBM Developer (employee)

EXECUTIVE SUMMARY

The goal of this white paper is to explore the business value for IBM® shops in utilizing MyEclipse Blue: Secure EditionTM (Blue Secure) as an alternative to IBM Rational®, and how a company with 500 developers using Blue Secure can easily save up to \$4 million over three years (realizing ROI on a Blue Secure transition in just weeks).

The paper will explore common issues faced by today's enterprises that are experiencing a variety of pain points when purchasing, standardizing, distributing and managing the roll-out of their IBM developer tool stacks to their teams. The paper will also encapsulate several areas where corporations are experiencing developer time loss and how Blue Secure can free additional time and money from the tooling logistics process.

...a company with 500 developers using Blue Secure can easily save up to \$4 million over IBM tools.

WHAT IS MYECLIPSE BLUE SECURE EDITION?

MyEclipse Blue Secure EditionTM is an Eclipse-based IDE designed to work seamlessly with IBM WebSphere[®] (plus 35 other servers), and to make the transition away from IBM's Rational Application Developer[®] (RAD) as painless as possible. Usually, a corporation begins looking for a RAD replacement due to the high per-license and support costs, as well as the large footprint RAD requires. Additionally, many shops find that IBM does not have advanced support for some of the more popular open standards such as Spring or Hibernate, leaving many enterprises unable to take full advantage of these technologies.

Unlike RAD, MyEclipse Blue SecureTM comes with an industry-leading management platform included. Administrators have the ability to create and manage all their Eclipse-based tooling, including tool lock-down, plugin management, update enforcement, license activation, reporting and more - all from a central location.

The cost difference between MyEclipse Blue Secure Edition and IBM Rational[®] is significant: as of January of 2012, RAD could cost as much as \$8270 per developer, whereas Blue Secure delivers the same tooling functionality - plus advanced management tools - at only \$249 per developer, per year (support included, before discounts).

Plus, MyEclipse Blue Secure[™] is easy to migrate to: it will install on the same machine as RAD and when a RAD project is imported into Blue Secure, none of the RAD-specific project metadata is removed. After enhancing the project so that Blue Secure recognizes it as a RAD project, you can make changes to the project in either MyEclipse Blue Secure [™] or RAD. This eases both the company-wide transition to the new tool, as well as simplifying legacy code maintenance.

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THE IBM COST COMPARISON

With the current price (\$8270: December, 2011) of IBM RAD's "Floating User" licenses, even allowing a steep 30 percent discount, MyEclipse Blue Secure will save an enterprise significant hard costs over a three year period.

Cost per developer for initial IBM RAD license and 12 months support = \$5789 Cost for 2 years maintenance and support 15 percent = \$1737 Per developer for license and 3 years of support = \$7526 Overall cost with RAD - 500 licenses for 3 years = \$3,763,000

Instead, with MyEclipse Blue EditionTM an enterprise is spending \$216 per developer, per year (with volume discount included). Support and all product updates are included in the pricing, as is the \$1500 annual fee that covers your entire organization.

Overall cost with MyEclipse Blue Secure for 3 years with 500 developers = \$324,000

...a company will save over \$3.4 million over 3 years using MyEclipse Blue Secure on license cost alone.

It's already a no-brainer decision. And that's just on the hard cost numbers. We haven't even gotten into the cost-intensive diseconomies of scale yet.

WHAT ARE DISECONOMIES OF SCALE?

Diseconomies of scale are the forces that cause firms to produce goods and services at increased per-unit costs. Some of the forces which cause diseconomies of scale are time lost on non-mission-critical tasks (such as tool stack management), software update schedules, communication lags, duplication of efforts between employees leading to long term monetary loss, office politics and more. For this white paper, the focus is on time loss which results in delayed or broken software delivery, and eliminating duplication of efforts in software license and tool stack enforcement to best focus developer time on creating and maintaining actual software projects.

BLEEDING MONEY ON MANAGEMENT

As seen, the hard cost savings on RAD alone are enough reason to move to Blue Secure. But what about those other areas that corporations bleed money from without noticing? For example, how much time is spent in the enterprise controlling tool configurations?

Historically, a central tooling group has created wiki pages or some form of documentation detailing the setup of developer tool stacks. This puts the onus on the developer to follow the rules to the letter or risk a loss of time in setup - or worse, broken builds due to tool mix-ups.

Research has shown that mid-level Java developers in the USA cost companies about \$63 per hour, overhead included. This means that if your developers spend even 5 hours per year fiddling with their tool configurations, the company is spending about \$300 dollars annually

and nearly \$1000 over three years per developer. You might not think that's much, but note that's already more than 1.5x the cost of Blue Secure over the same period.

LICENSING CONCERNS

Commercial licenses present another management issue that can steal time from development tasks. For example, a corporation currently using MyEclipse Blue Secure™ as a development standard may download the offline installers directly from the MyEclipse Web portal, and then place them on an internal server for developers to consume. That seems easy enough - but how are these end users keeping their licenses up to date? Often, the onus is on the individual end-user to key-in their license code, activate the product, etc. But what happens if they don't? What if some developers have issues with their license keys or the activation process?

Many corporations find license management a problem that can consume time away from their developers' core competencies in this diseconomy of scale. This can steal hours every year in the pure logistics of license management. This is especially apparent when the time to update tools arrives.

If 500 developers spend only one hour per year on licensing or activation setup and troubleshooting, it can cost the company over 1500 working hours over three years at a cost of over \$94,000.

...developers spending only one hour per year on licensing tasks can cost your company over \$94,000.

CLEAR COST OF UPDATES

Obviously, enterprises want developers updating their MyEclipse Blue Secure[™] installations at the appropriate times, and not haphazardly. But even planned updates and roll-outs have cost concerns.

A common scenario involves a central tooling team or "toolsmith" sending out an internal communication announcing that a MyEclipse or Rational update is available and required. Often, an update has been made to the master "installation wiki" or other document that details the update and how to get it.

The problems begin to arise as once again the onus is on the end-user/developer to get the update, install it correctly (and do so in a timely manner). In many cases, the software is obtained directly from MyEclipse, putting the responsibility on the developer to download packages that can be up to 1GB in size. Meanwhile, overall team productivity is impacted when a forgetful developer misses a required update or applies the change incorrectly causing a broken source code change impacting the product.

Looking at Genuitec's Pulse statistics (Pulse is Genuitec's software provisioning tool with 1.5 million developer-users), we see that average Eclipse tooling-based developers update their tools on average 2.2 times per year - we'll say twice a year to keep the math easy. A team of 500 developers downloading 1GB of software from a vendor at 1MB/second takes about 17 minutes. Installing the new software and setting up the required preferences, as well as updating workspaces can easily take another 45 minutes to one hour. If there are any hiccups, this process can easily take 2-3 hours per update (which is happening a couple of times a year).

Thus, even at the mid-level developer cost, teams can easily waste 6-10 working hours over a three year period at an additional per-developer time cost of about \$500. Thus, in our example of 500 developers, update woes alone can cost \$250,000 over three years. Of course, with MyEclipse Blue Secure, this cost is nullified with easy update management and the ability to push updates to end-user desktops behind the firewall.

...rolling out software updates can cost your teams up to a quarter of a million dollars over three years.

MULTIPLE TOOL VERSION CONTROL

Another common issue is having to manage disparate teams' tooling versions simultaneously. Not everyone in the company will be working with the exact same tooling or version number. It's the nature of the beast that corporations often have multiple projects under simultaneous development and use different tools for each project. Teams will often standardize on a MyEclipse Blue Secure™ tool stack and preferences for a specific project and not change or update until the task is complete. This creates a natural fragmentation between teams.

The responsibility for maintaining the tooling versions and each team's installation guides often falls to a higher-up Sr. Developer or Team Lead who will have to deal with any "broken build" issues. A common scenario involves a team member neglecting to update or updating too soon. The time cost to discover the issue and then the corresponding roll-back or update can be measured in hours, or even days.

Often, the Team Lead will be called after the developer has spent a couple of hours trying to fix the problem with no success. The Team Lead then intervenes and spends a couple of hours troubleshooting and recreating the problems to find solutions. Conservatively, this can take 2-3 hours of developer time and 1-2 hours of Team Lead time per occurrence. At average hourly rates of \$63 and \$78 per hour (the average for Team Lead roles), every occurrence of tool breakage can cost the enterprise about \$350 in lost costs. If you have a team of 500 developers, half of whom have tool stack compatibility issues in a year, the enterprise will lose about \$250,000 over three years just spent fixing multiple-version issues.

MyEclipse Blue Secure TM can manage multiple tools and multiple versions simultaneously, and give team leads the ability to lock-down and change tool stacks

as needed. By eliminating the need for the end-developer to manage the tools, time is freed to accomplish development tasks.

STOP THE BLEEDING

For an IBM shop, these common tasks are considered non-value-added work; meaning no code is actually written and projects are no longer moving forward. Teams find themselves locked into vicious cycles of dreading updates and rollouts to avoid the natural pain - and the cost associations.

When you factor in multiple groups updating tools separately and managing their tools independently, these common corporate problems can be increased by an order of magnitude. The task of simply "picking the right version" suddenly seems much easier than the actual implementation of that decision. Blue Secure effectively eliminates these issues, and rolls back the developer factors brought on by diseconomies of scale.

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TO THE RESCUE: MYECLIPSE BLUE SECURE

Blue Secure provides corporations with a cost-effective way to mitigate concerns around tool updates and management. For example, license compliance and management is handled directly through a centralized team. This license management method takes the onus off developers to find, apply and manage their tooling licenses and instead frees them to actually code their project. It puts tool responsibility back into the hands of those employees hired for that role.

Further, Blue Secure allows toolsmiths to conveniently set up vast MyEclipse BlueTM tool stacks once, ahead of time, and provide a centralized location for updates and version control. By also enabling push capabilities, the struggles of making sure everyone applied the update are a thing of the past. Developers pull down their required updates directly from the company intranet where Blue Secure is hosted, allowing toolsmiths control of the entire update and correct version number process.

Blue Secure allows companies to manage versions of MyEclipse and Eclipse between teams easily. By giving toolsmiths visibility into the tooling installed on each developer machine, it is easy to have employee X and employee Y on different tools for different aspects of the projects. Teams can even have multiple, easily-managed instances of tool versions (such as MyEclipse Blue SecureTM 9 and 10, as well as open source Eclipse versions too) on the same machine, but provisioned correctly to avoid the broken build commonly found when instances of older and newer software are used at once.

Conveniently, Blue Secure does not require companies to "reinvent the wheel" when it comes to setup. Blue Secure integrates with existing systems and intranet services, by asking simple company policy and governance questions upon installation. It provides customizable, sample

intranet portals that companies can utilize (if desired) and the ability to deploy software through existing SMS infrastructures. The supplied management and end-user interfaces give the enterprise a quick proof point to rapidly test Blue Secure, as well as a customizable interface they can brand and incorporate within their existing infrastructure.

"...we're looking for affordable solution for developers without the 80 pound sledge hammer, when all they really need is something like a trickle of water." - MyEclipse Blue Customer

In short, Blue Secure allows your developers and the team leads to do what they do best - ship quality software. Blue Secure easily removes the requirement for developers to be IDE toolsmiths, but empowers managers to visualize and control the tool usage for each project.

FINAL CONSIDERATIONS

In the sample scenarios described above for a team of 500 developers, minor inconveniences and troubleshooting of tooling problems cost the company nearly \$4 million over three years. That's about \$8000 per developer - and that's assuming fairly conservative, everyday scenarios.

In contrast, Blue Secure costs only \$249.95 annually per developer with an annual maintenance fee (once for the whole company) of \$1,500 - it presents a savings of over 90 percent in developer costs lost to the above described issues. Additionally, time overhead for the team leads and others on maintaining tool wikis, installation instructions and distributing the software criteria are eliminated, resulting in further soft cost savings.

Blue Secure represents a 90% savings over IBM Rational® in both hard licensing and time costs.

The initial cost in setup and implementation of Blue Secure will vary by company, but must be considered to calculate ROI. Even over-estimating a man-month at a Sr. level to focus solely on Blue Secure, set up would result in a one-time, soft cost of \$10-13,000. At this metric, full initial setup ROI could be realized within two months or less, with subsequent calendar year ROI-gain in about one month.

CONCLUSION

The quantifiable costs associated with IBM tooling are exceedingly high, and their "friendliness" towards some of the most popular open source technologies leaves something to be desired. As a replacement for IBM Rational Application Developer®, MyEclipse Blue

SecureTM delivers a full-featured development environment that removes the guesswork from developers, and paves the way for smooth migration strategies.

In addition to the high license and support costs, non-development tasks that software developers are asked to perform are very high - with the "intangible" work related aspects even higher. License application concerns, tooling updates, multiple version control, environmental lock-down and new employee setup are just a few of the key concerns that are costing today's IBM shops a bundle of cash and are threatening the success of software projects. These diseconomies of scale can be combated by utilizing emerging technologies like MyEclipse Blue Secure EditionTM to remove external responsibilities from developers and create centralized management for multiple tooling groups.

This can easily and consistently result in annual savings measured in the millions of dollars, while focusing development teams on their projects - not their tools.

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http://www.genuitec.com/sdc/platforms_myeclipse.php

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