QUICK TAKE

October 15, 2004

IBM/Rational Launches Atlantic Fleet
Smoother Sailing For Development Tools Integration Ahead

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EXECUTIVE SUMMARY

In the week that the US celebrates Columbus Day, IBM officially announced its own Atlantic crossing: Its Rational division unveiled the initial release of its new Software Development Platform, code-named Atlantic. This release represents the most comprehensive revision — "upgrade" does not do justice to this rearchitecting of the key tools — of IBM's development tools since Rational first charted a course toward full application life-cycle management. With the majority of the client-side tools re-engineered on top of the open Eclipse platform, the new tools offer a greatly enhanced user experience and much smoother integrations across the life cycle. As you would expect in a first release, work remains to be done, particularly on server-side integration, but unlike Columbus, Rational knows where it is heading, knows how far it is has to go, and knows what the New World will look like. Application development organizations that want an integrated life-cycle suite should put Atlantic at the top of their shortlists. Existing Rational tool users should accelerate their plans to upgrade to the new releases — there's a lot to be gained.

RESEARCH CATALYST

The Rational division of IBM formally unveiled the release of its Software Development Platform life-cycle tools, code-named Atlantic.

ATLANTIC ESTABLISHES LEADERSHIP AND DIRECTION

The next battle in the struggle for the hearts, minds, and keyboards of IT shops will be fought on two fronts: comprehensive, well-integrated suites of life-cycle products and granular, purpose-specific tools.[1] Atlantic represents the first release of IBM's new Eclipse-based offering to address the former approach — and it's a very impressive offering, even for a first release. This isn't just an upgrade, this is a generational shift, and IBM is taking full advantage of the opportunity to break down some long-standing limitations in its tool suites. It is also exploiting to the hilt the integration and simplification possibilities that Eclipse enables. Some of the key benefits that users can expect of this new release:

- **A greatly enhanced and simplified user experience.** The new client tools take advantage of the Eclipse GUI framework and its SWT, and they look just great — "better than native" in the words of one person who saw them during a demo earlier in the year. They also share a consistent user model and interactions and are tightly integrated with each other within the UI shell. Best of all, they are much easier to use. With the previous generation of products, Rational Rose XDE users in particular often told us that it was becoming necessary to use two monitors to accommodate all the menus, toolbars, palettes, navigators, and windows that the product provided! Now, new

role- and task-based perspectives simplify the user's view based on context, leaving more precious real estate for actual content — like models or code. Expect significantly enhanced user productivity as a result.

- **Better alignment of tools with user roles.** The division of labor between different pre-Atlantic tools largely reflected the historical legacy of the products that Rational had acquired as it assembled its life-cycle coverage. With Atlantic, Rational has taken the opportunity to refactor functionality so that each tool better reflects task assignments in modern shops. For example, the application developer gets code review and runtime analysis functionality that previously would have required the separate Rational PurifyPlus product, as well as a relevant subset of UML modeling. Rational Rose XDE is succeeded by two products, Rational Software Architect and Rational Software Modeler, each reflecting the concerns of different roles.[2] The clearer alignment of role and functionality also contributes to the simplified user experience — there are far fewer extraneous functions to distract or confuse. Expect to spend less time switching between tools and more time getting actual work done.

- **Dramatically improved life-cycle integration.** Rational's previous generation of suites were considered the market leaders for life-cycle integration, but even so, each and every cross-product connection was hard won. The new products are designed from the outset to integrate with each other and with partner tools, and they take full advantage of the Eclipse integration framework and its common metamodels. Expect the new tools to be consistently and uniformly integrated with each other and new integrations to be considerably easier to add, resulting in much improved life-cycle traceability and project visibility. Expect new versions of Rational Unified Process to take advantage of these enhancements, too.

The Voyage Is Not Over

Impressive as this is for a first release, work remains to be done before the voyage is complete. Three major areas in particular remain to be addressed:

- **Laying out the repository strategy.** While the client-side integration is strong, the back-end story has yet to be told. In this release, the tools for the most part continue to store their design artifacts in their individual storage mechanisms, and that limits the ability of project managers and others to develop custom traceability checks, progress reports, or metrics. (By contrast, one of the strengths of the Microsoft Visual Studio Team System will be its shared repository.[3]) Will IBM evolve Rational ClearCase to become the shared store behind all the life-cycle tools, or does it have some other strategy in mind? IBM needs to articulate at least the vision, if not the technology, so that users can develop a clearer expectation of how well Atlantic will match up with other life-cycle offerings in the long run.

- **Completing the client transformation.** Some client tools remain to be converted to the Eclipse framework. In particular, the project portfolio management tool that Rational will add to the offering as a result of its acquisition of Systemcorp, also announced this week, will need to be ported over.

- **Clarifying the third-party tools integration picture.** In conjunction with this release, IBM announced a new "Ready for Rational" partner program to certify third-party products for integration. But what about other Eclipse plug-ins? Atlantic will certainly support the Eclipse plug-in model and common metamodels, but in order to take full advantage of Atlantic, other plug-ins will want to also make use of any metamodel extensions that Atlantic uses and that IBM has said it will publish. Completely open metadata will be key. In an ideal world, the entire life-cycle metamodel would be as open as the UML 2.0 modeling metamodel and the Hyades metamodel for testing tools are.[4]

R E C O M M E N D A T I O N S

FOR INTEGRATED TOOL SUITES, ATLANTIC IS A LEADER

- Existing Rational tools and suites customers should begin evaluating Atlantic immediately. Individual tools will roll out over the course of the fourth quarter, but IT shops can begin planning now. Conversions from older tools should be carefully planned — for example, from Rational Rose XDE to Rational Software Architect or Rational Software Modeler — as model conversions will be one way only.

- IT organizations considering an integrated life-cycle approach for their development tools should put Rational at the top of their shortlists. Not only is the tool set comprehensive and the integration impressive, it has the architecture to grow and evolve to meet future needs.

ENDNOTES

[1] Eclipse promises to enable two diametrically opposed approaches to development tools for vendors: tightly integrated single-vendor solutions and granular single-purpose tools. See the October 7, 2004, Trends "Eclipse Changes The Game For Development Tools."

[2] The Rational Rose XDE products will continue to be available and supported for some time to ease the migration of the existing customer base, but they will not be the focus of major new investment. For example, don't expect to see UML 2.0 support added to those older products.

[3] Visual Studio Team System, the integration framework underlying the tools, provides a comprehensive and consistent shared basis for life-cycle integration, but without the rigidity of previous generations of highly integrated tools. See the June 14, 2004, Trends, "Microsoft Visual Studio 2005: More Than The Sum Of The Parts."

[4] Hyades is an open source testing framework with facilities for tools that manage and execute functional and load testing and analyze application usage. As part of Atlantic, IBM/Rational will re-engineer its own line of testing tools around Hyades. See the October 8, 2004, Quick Take "What Hyades Means For IBM, Its Customers, And Its Competitors."