



## IBM Rational Asset Analyzer, Version 5.5

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### Highlights

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- ***Enables you to identify the artifacts that a proposed code change will affect, allowing you to make changes more quickly, with less risk***
- ***Helps reduce the complexity of software projects by delivering up-to-date knowledge of application components from the code itself***
- ***Improves process and team efficiency by making the same application insight available to all team members***
- ***Provides interactive textual and graphic reports that can improve staff understanding of mainframe and distributed assets and their relationships and help shorten the learning curve for new developers***

Maintaining existing applications can consume a large portion of an IT budget, but this continued investment is a necessity because of the value that these assets bring to an IT organization. To maximize business efficiencies, you need to increase maintenance productivity, accelerate modernization projects and reduce costs. You also need to devote a sizable portion of your IT budget to projects that add business value and that help your organization respond with flexibility to changing marketplace and IT requirements. All the while, you need to enable existing applications to integrate with Web services and a service-oriented architecture (SOA).

IBM Rational® Asset Analyzer, Version 5.5 software helps you maintain, extend and transform existing applications by providing rapid application understanding and impact analysis, and it helps you make informed decisions

about application projects by presenting essential management information. Additionally, Rational Asset Analyzer scanning and reporting capabilities can help you modernize your existing enterprise assets.

For IBM System z™ and distributed environments, Rational Asset Analyzer provides information about finding and reusing application code and the components that connect that code. For your Java™ Platform, Enterprise Edition (Java EE) systems, Rational Asset Analyzer can help you understand the code operating in your IBM WebSphere® run-time environments. With this tool, you can easily build and deploy composite applications—systems that include mainframe and Web-based components. And Rational Asset Analyzer can grow with your business to become an integral repository for insight about your critical application assets.

## Reduce project complexity

With Rational Asset Analyzer, Version 5.5, you can reduce the complexity of software development projects by providing your designers and analysts with access to up-to-date knowledge of application components. Armed with this information, your staff can more easily supplement outdated or nonexistent documentation with the newest application changes. And, with the same application insight available to all team members, you can improve process and team efficiency throughout the development lifecycle. Rational Asset Analyzer also helps improve team understanding and communication through customized, annotated meta-data gathered through comprehensive scanning processes and compiled in an IBM DB2® data server.

Not only can Rational Asset Analyzer empower your existing staff, it can also help shorten the learning phase for new developers by providing them with improved documentation and clearer insight into application dependencies at multiple levels, including:

- *Jobs.*
- *Files.*
- *Programs and applications.*
- *Programming languages (for example, COBOL, PL/I, Java, HTML, XML).*

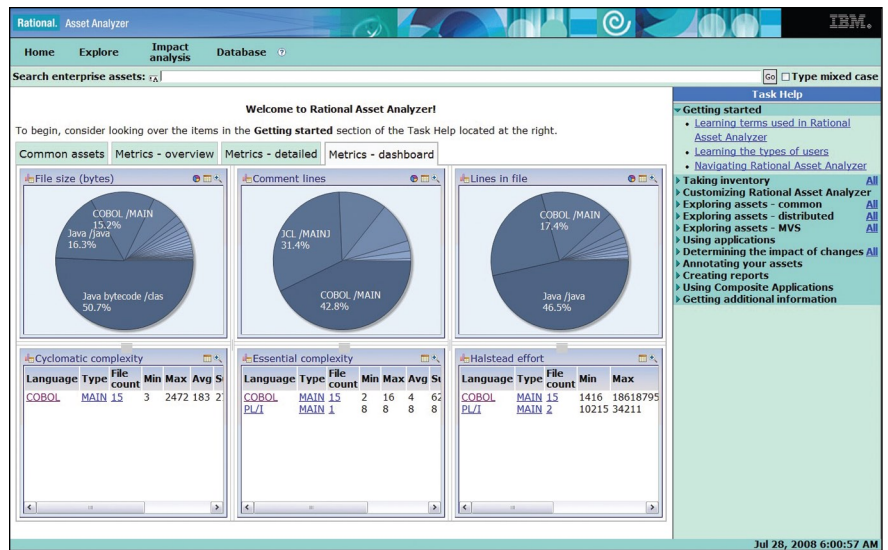


Figure 1. The Rational Asset Analyzer metrics dashboard provides management teams with the information needed to enhance their understanding of complex applications.

To help you draw the most value from Rational Asset Analyzer, IBM has packaged the software with best practices and support assets. Documentation surrounding the product as well as help files can be accessed through plug-ins for the IBM WebSphere Help Center tool or any Eclipse 3 integrated development environment (IDE). And the software comes bundled with the IBM Support Assistant and IBM Education Assistant tools, which enable users to find information and educational modules that aid with problem diagnosis and resolution. By providing a more thorough analysis of proposed changes, Rational Asset Analyzer can help you reduce the risk involved in routine application maintenance and operational changes. For example, you can verify that you have all the source components for an application at your main work site or at your disaster recovery site.

## Scan applications more effectively

The true strength of Rational Asset Analyzer lies in its robust scanning capabilities. The software enables you to scan assets for mainframes and distributed systems, including COBOL code, PL/I code, copybooks, Java Archive (JAR) files, Enterprise Archive (EAR) files and Web Archive (WAR) files. Rational Asset Analyzer is equipped with scanners that support the syntax of IBM Enterprise COBOL and IBM Enterprise PL/I compilers. The COBOL scanner also provides support for EXEC IBM CICS® (Customer Information Control System) statements, while the PL/I scanner can support pointer-based data elements. By leveraging these scanners, you can simplify the task of upgrading to the latest versions of the COBOL and PL/I compilers by identifying syntax and semantics issues that would hinder your progress. The software also features scanners that can analyze Web services to capture their semantics and present their relationships.

By leveraging Rational Asset Analyzer, you can support composite applications, because the software identifies and documents dependencies that span mainframe systems and Java components. And in the infrequent cases when the software cannot automatically detect these relationships, you can use Rational Asset Analyzer to manually articulate your own relationships between components.

Users of the scanning and inventory features of Rational Asset Analyzer will find that they can:

- *Add statistics or metrics to file summary pages.*
- *Render annotations on appropriate summary pages.*
- *Use a wizard to create distributed scan roots.*
- *Switch more easily between compiler-based scanning and internal scanning for COBOL and PL/I code at the site, application, container and file levels.*
- *Access a user exit to handle pre-processor statements in COBOL applications.*
- *Leverage duplicate basic mapping support (BMS) map-set identifiers.*
- *Stop scanning at various stages to minimize performance impact on inventory processes.*

### **Increase productivity of analysis processes**

The analysis phase of an application's development cycle can consume a significant portion of total development costs. But Rational Asset Analyzer can help minimize those costs by improving analyst and developer productivity. The software enables you to create, name, save, share and rerun your customized structured query language (SQL) queries to easily mine Rational Asset Analyzer metadata to meet your information requirements. You can display the results of these queries in a tabular format from a Web browser, allowing you to restrict which data elements you view (e.g., used or declared). You can also add these custom queries as an action on the pull-down menu on most detail pages. To easily retrieve these preconfigured summary and detail pages, you can use the software's bookmarking capability, which helps you easily and repeatedly access the search results your developers designate as important in their daily work. Developers can also have Rational Asset Analyzer identify all dead code when they are viewing their source code.

During the analysis process, Rational Asset Analyzer offers a flexible, wizard-driven user interface that allows you to quickly create impact analyses. From this interface, users can easily designate the scope of the analysis,

restricting it to only run within a single program or structuring it to run across multiple applications, for instance. A messaging feature keeps users apprised of the status of analyses as they are being created and run. And when the analysis has finished, the software displays the results in a tabbed format on a details page for easy viewing. You can access this information via a Web browser, much as you can display SQL query results.

If you are running composite applications in your environment, Rational Asset Analyzer can automatically discover Enterprise JavaBeans Query Language (EJB-QL) dependencies, enabling you to manually create relationships and graphically render results. Rational Asset Analyzer provides analysis-queue information, as well as the ability to select all data items for impact analysis. And you can take advantage of added support to resolve dynamically formed file names (data stores) that are referred to using 88 level-set statements.

Rational Asset Analyzer offers sample metrics for mainframe applications and distributed software to help you unravel the relative complexity of your applications. This information, together with the details page of the impact analysis, can help you more accurately determine the scope of future development projects.



## **Bring the capabilities of IBM WebSphere Studio Asset Analyzer to the Microsoft Windows platform**

Although Rational Asset Analyzer and IBM WebSphere Studio Asset Analyzer software have similar code bases, there are several differences between the applications, including their deployment configurations. More specifically, Rational Asset Analyzer is installed to operate on workstations hosting the IBM WebSphere Application Server platform running on the Microsoft® Windows® operating system; WebSphere Studio Asset Analyzer is deployed on IBM System z mainframes running the IBM z/OS® operating system.

Rational Asset Analyzer is useful in managing analysis and scanning processes for either a small team that needs to get started quickly or for the entire enterprise. It is also ideal for offloading the technology cycles involved with these processes onto a Windows server. Conversely, WebSphere Studio Asset Analyzer is more suited for large teams that need to scan source code stored on the mainframe (e.g., to control security policies preventing source code from being downloaded). The WebSphere Studio Asset Analyzer software also enables you to scan artifacts such as assemblers, CICS statements, IBM IMS™ binaries or DB2 catalogs.

## **Put knowledge to work**

Beyond the internal value that Rational Asset Analyzer can bring to your design processes, it can also help you better understand your core business applications and extend those applications to your business environment. With this improved understanding, you can start the change process efficiently—while minimizing the risk to your current business operations. For example, by combining Rational Asset Analyzer with IBM Rational Developer for System z software, you can create a single IDE to support your next generation of COBOL and Web services applications. Similarly, with IBM Rational Transformation Workbench software, you can leverage Rational Asset Analyzer to help accelerate transformation projects for large mainframe applications and to simplify the componentization of your existing software assets.

## **For more information**

To learn more about IBM Rational Asset Analyzer, Version 5.5 software, contact your IBM representative or IBM Business Partner, or visit:

[ibm.com/software/awdtools/raa](http://ibm.com/software/awdtools/raa)

For information regarding the technical software and hardware requirements for IBM Rational Asset Analyzer, please see:

[ibm.com/software/awdtools/raa/sysreq](http://ibm.com/software/awdtools/raa/sysreq)

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