BMC Compuware Topaz for Program Analysis

Accelerate mainframe program understanding with intelligent analysis and visualization

**PRODUCT DESCRIPTION**

BMC Compuware Topaz for Program Analysis helps developers understand unfamiliar or complex mainframe applications through a visual representation of both the code structure and logic as well as the actual I/O and program trail during execution.

**BUSINESS CHALLENGE**

Discovering and understanding the calls mainframe programs make to other applications and databases during runtime can be an extremely slow, difficult, and error-prone process—especially for inexperienced mainframe developers faced with applications that may have little or no documentation.

**BMC SOLUTION**

BMC Compuware Topaz for Program Analysis, part of the BMC Compuware Topaz suite of mainframe development and testing tools, intelligently analyzes mainframe programs and presents the results of that analysis in a visually intuitive manner. Using program structure and logic flow charts, Topaz for Program Analysis reduces learning curves for programmers unfamiliar with the mainframe or unfamiliar with the inner workings of a program. The analysis provides invaluable insights into programs that don’t have documentation and are 20, 30, or even 40 years old.

**KEY FEATURES**

- See dynamic, graphical mapping of program-to-program calls
- Pinpoint performance bottlenecks, inefficiencies, and inter-program impacts
- Analyze and understand deeper program details
- See a “snapshot” of a program’s real behavior in production under present conditions
- Group together source code for programs into Java-like “projects”
- Discover and investigate dependencies across programs and copybooks, without moving code off the mainframe
- See an instant static visual summary of a single program
- Support both COBOL and PL/1 applications

**KEY BENEFITS**

- Increase application and program understanding by making highly complex data relationships more understandable through dynamic analysis and visualization
- Give next-generation developers the confidence to make changes to poorly documented and highly complex programs
- Avoid unintended consequences when making program changes with static analysis of code

Gain graphical visibility into what happens when an application executes, including the ability to save and replay the execution trace without source code dependencies.
PRODUCT DETAILS

Runtime Visualizer
Runtime Visualizer provides unprecedented visibility into complex interactions between mainframe programs, dramatically accelerating application understanding. Gain graphical insight into what happens when an application executes, including the ability to save and replay the execution trace without source code dependencies.

Impact analysis
Impact Analysis enables developers of all skill levels to quickly and accurately discover and investigate dependencies across programs and copybooks without having to move code off the mainframe.

Integration with SonarSource and Jenkins
Topaz for Program Analysis integrates with Jenkins for Continuous Integration. Through this integration, COBOL code metrics can be easily published into SonarSource’s SonarQube, a popular dashboard for tracking quality metrics and technical debt, enabling development and QA managers to keep projects on schedule and address shortfalls in quality or technical standards.

Additional features include:
• 3270 emulator: Complete one-off “green screen” tasks without leaving Topaz.
• Dynamic flow charting: Access a flow chart of a program being edited, which can be leveraged to drive editing.
• Display logic flow of COBOL paragraphs or PL/1 PROC: Leverage a visual representation of logic (ideal for gaining a quick understanding or for code walkthroughs), which can be used to drive the editor session.
• Data flow: Gain visual and tabular displays of inputs to and outputs from any variable used in the program.
• Program-level metrics: Quickly understand the scope of a program through program-level metrics.
• Program behavior insights: See I/O types and drive edit/browse sessions from the visualization.
• Detailed information on program calls: Get specific information on the programs called during application execution, then filter, sort, display, and export these trace records for other use.

KEY BENEFITS (CONTINUED)
• Increase developer productivity by offering elegant simplicity in design and usability
• Improve application quality and delivery speed by producing better change specifications and speeding up the actual time needed to change programs
• Advance application performance by showing I/O calls that can be used to identify unnecessary program calls

FOR MORE INFORMATION
To learn more about BMC Compuware Topaz for Program Analysis, visit bmc.com.

About BMC
From core to cloud to edge, BMC delivers the software and services that enable over 10,000 global customers, including 84% of the Forbes Global 100, to thrive in their ongoing evolution to an Autonomous Digital Enterprise.

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