

New software to help organizations build smarter products

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IBM today announced new software to help organizations bring intelligence to the products, systems and applications people use everyday. From creation to development and delivery, the new software simplifies the entire process enabling organizations to reduce costs, address compliance and regulatory requirements and ultimately get innovative products to market quickly.

From cars to [surgical robots](#), everyday products and systems are becoming more sophisticated due in part to an [infusion](#) of software. As products become more intelligent, the number of interactions between the software, mechanical and [electrical components](#) increases and becomes more complicated. The challenge for businesses that build these "smarter products" is how to address this complexity without slowing development or increasing costs.

With the new IBM Engineering [Lifecycle Manager software engineers](#) can now step back and view a project in its entirety to better understand the hundreds of thousands of complex interactions. The software provides searching, querying, viewing and impact analysis across multiple engineering disciplines. This more holistic view of the project helps an organization make better design decisions by identifying potential conflicts and variables that could delay the project and cause cost overruns.

"The formula is simple. To succeed companies must deliver [innovative products](#) faster and at a lower cost than their competitors," said Kristof Kloeckner, general manager IBM Rational Software. "The new offerings from IBM help organizations move beyond the siloed development process of the past 10 years, integrate the engineering disciplines and see the big picture to ultimately develop, test and deliver a better solution."

Everywhere people turn today, the addition of

software into products and systems is enabling exciting new capabilities. Keeping up with these advances can be challenging for the developers. For example, a new car can have 5 to 15 million lines of [software code](#) that are reliant on and integrate with thousands of mechanical and electrical components. If there is a change to the software that controls the automatic braking system of the car, the product development team needs to assess the impact of that change to other software code and systems.

Without the new IBM software, answering questions such as will the braking system still work or will this cause the project to go over budget, could take months of compiling data by hand from external sources. With the new IBM software, engineers could run a query and quickly identify and analyze the dependencies between the potentially thousands of systems and software design artifacts.

Failure to understand these dependencies and relationships can be costly. Systems engineering mistakes are estimated to cost companies more than 22 billion dollars in the United States alone. When you consider the increasing compliance requirements faced by many industries the risk increases. One compliance failure generates an estimated \$81 million dollars in extra costs for firms earning more than \$1 Billion dollars in revenues.

The Need for Continuous Delivery

As mobile applications, devices and systems are becoming more sophisticated, market demand for personalization, customization and frequent updates has skyrocketed. The ability to continuously deliver high quality software to the market quickly and efficiently is now key to competitive advantage. In a forthcoming IBM Institute for Business Value study, 54% of companies identified software development as crucial to their competitive advantage, yet only 25

percent said they are able to leverage software for competitive advantage today.

Provided by IBM

To help organizations deliver software innovations quickly and efficiently, the company also unveiled IBM SmartCloud Continuous Delivery. This new offering helps developers address some of the key inhibitors to rapid and cost effective software delivery including timely access to feedback from clients, ongoing collaboration with line of business and the ability to automate key processes.

IBM SmartCloud for Continuous delivery helps companies reduce software delivery cycle time by:

- Accelerating the time from code creation to deployment from days to minutes through automation, standardization and repeatable processes.
- Simplifying collaboration across an organization through joint projects plans, shared workflows and tasks for building, testing and deploying code.
- Automatically tracking project changes such as development code and application configuration and running pipeline tasks when appropriate.
- Helping match business growth needs by near-instant deployment of hundreds of virtual machines for development, test or production requirements.
- Reducing development time and complexity by providing code for repeatable processes.

IBM SmartCloud Continuous Delivery and IBM Rational Engineering Lifecycle Manager are now available.

To learn more about how [software](#) is powering a planet of intelligent things:

More information:

www.ibm.com/software/rational/announce/embedded/

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