## Rational Software Architect Designer product overview

Built on the extensible Eclipse platform, IBM® Rational® Software Architect Designer provides a broad range of design and development tools that you can use to rapidly create, evaluate, and communicate software architectures and designs.

You can use Rational Software Architect Designer to perform the following tasks:

- Design and analyze applications at higher levels of abstraction.
- Specify and maintain key aspects of your service, framework, application, and deployment architectures.
- Collaborate more effectively with your team members, communicate more effectively with your project stakeholders, and help to ensure that outcomes fulfill requirements.
- Reduce implementation times by generating code and other runtime artifacts.
- Foster re-use of common solution architectures to simply application and data center complexity.

The Rational Software Architect family provides architecture and design tools that span the application lifecycle from capturing initial ideas, defining solution architectures, planning your SOA, designing lower level application details, and planning and automating deployments.

You can design a software application using a variety of modeling and design languages supported by Rational Software Architect Designer such as: sketching, Business Process Model and Notation (BPMN), UML and domain specific UML extensions like SoaML and UPIA, and Deployment Planning.

To reduce implementation times and improve quality, you can transform your models into Java™ or C++ source code, runtime artifacts like WSDL files, and configuration files using the transformations provided with Rational Software Architect Designer or, your own customized transformations that let you target your unique architectures, frameworks, and coding standards.

Rational Software Architect Designer extension for SOA helps you design and deliver Java Enterprise Edition solutions using SOA and targeting IBM WebSphere Application Server and WebSphere Portal environments.

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You can refine the details of the code using the underlying Eclipse integrated development environment (IDE) and specialized Java EE development tools that come with IBM Rational Software Architect Designer for WebSphere® Software. Combine conceptual modeling and concrete (code-level) modeling through various flexible process options to manage the relationship between your evolving designs and implementations.

As work on your project progresses, you can ensure that the solutions will be readily deployable by using the capabilities of the built-in technical and deployment architecture platform. With these built-in capabilities, you can specify, through all layers of the technology stack, the capabilities of the down-level layer and the requirements of the uplevel layer. It steps you through the process of ensuring that the software and infrastructure correlate with their requirements and capabilities. You can correlate requirements and capabilities for multiple target deployment environments (integration testing, performance testing, staging, and production). By bridging the communication gap between the development team and the IT operations team, you protect yourself from costly and frustrating rework when problems go undiscovered at deployment time.

If you have not already done so, take a few minutes to explore the product overview and getting started information that is located in the product welcome. Click **Help** > **Welcome**.