

Renesas Design France improves their development process with IBM Rational Synergy and IBM Rational Change

Overview

■ Challenge

Semiconductor system solutions company Renesas Design France needed to improve its processes and become more competitive.

■ Solution

IBM Rational Synergy and IBM Rational Change.

■ Key Benefits

- Increased process efficiency*
- Helps improve processes across the development cycle.*
- Enables Renesas Design France to raise quality and slash time-to-market.*
- Improves change control, communication, configuration management, and release management.*

The story

Renesas Design France, a subsidiary of Renesas Technology Corporation, a joint venture between Hitachi and Mitsubishi Semiconductors, is one of the world's leading semiconductor system solutions providers. In 2005, Renesas Design France initiated a CMMI process improvement initiative. They decided to migrate to a change and configuration management solution that would manage both their hardware and software assets, support their existing processes and improve product quality.

After selecting IBM® Rational® Synergy and IBM Rational Change, leaders at Renesas Design France quickly learned they could not only manage all change requests and bug reports, but also track current status and receive process improvement reports.

“Straight away, we focused on IBM Rational Synergy and IBM Rational Change because we knew that task-based configuration management would help us keep our project on track and improve product quality,” says Stéphane Thomas, Quality Manager, Renesas Design France.

Better diagnosis and communication with IBM Rational Change

For each bug report, Renesas Design France now captures the phase where the error was found and, upon resolution, indicates the phase in which the error could have been avoided. This causal analysis enables the company to identify the areas where improvement will deliver the highest return on investment.

“This level of insight would be impossible to implement in most other tools,” Thomas said. “With Six Sigma metrics on Defect Containment Effectiveness and Defect Screening Effectiveness, the company is able to continually improve its organizational development process.”

The dynamic metrics provided by IBM Rational Change highlight dangerous trends on defects. Because the Rational solution identifies errors early in the life-cycle, they can be cheaper to fix immediately, rather than in later phases. To improve its distributed development processes, Renesas Design France also uses Rational software to communicate with other design centers, which submit change requests via the Web.

Better control and resolution with IBM Rational Synergy

Thomas was impressed that IBM Rational Synergy combines configuration management with project planning.

“Renesas Design France produces ‘agile’ program releases approximately every quarter to ensure smooth integration and partner coordination,” Thomas said. “Each release is a milestone with clear functionality. IBM Rational Synergy is able to easily accommodate the company’s methodology.”

The Rational solution also accelerates bug correction. Once a defect is identified, a corrective task can be created, implemented, then easily applied to a release. Reactivity metrics show that the Rational Change and Rational Synergy applications help significantly reduce defect correction lead time.

Enhancing existing processes

Renesas Design France sees change and configuration management as the first step in its CMMI process improvement initiative. The reports and metrics that IBM Rational Synergy and IBM Rational Change provide will help the company quickly identify other process areas where improvement is needed. Causal analysis also enables them to focus their efforts efficiently. Metric history allows development staff to predict the number of bugs a program will have before design even takes place.

“Synergy provided us with control over our development; the program management it enabled allowed us to cut time-to-market significantly, compared to our previous high-end change management solution,” says Thomas. “With IBM, we really have found the ideal solutions to help us improve quality.”

The benefits

Since the initial purchase and deployment to 50 users, Renesas Design France has already measured many high-level benefits:

- *Supports the best of CMMI, Agile, and Six Sigma approaches*
- *Offers complete control of releases and deliveries*
- *Enables enhanced communication*
- *Facilitates faster reaction time*
- *Enables improved processes across the development cycle*

Based on the success of the IBM Rational solution, Renesas Design France is planning to extend the rollout to 150 users.

For more information

To learn more about IBM Rational Synergy and IBM Rational Change, please contact your IBM representative or IBM Business Partner, or visit:

ibm.com/software/rational



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“*IBM Rational Synergy provided us with control over our development; for program management, it enabled us to cut time-to-market.*”

– Stéphane Thomas, Quality Manager, Renesas Design France