IBM

The unity of diversity, for success.
Customer case studies of unified process and integrated development.

Governing and enhancing the process of software and systems delivery.

Software development needs an environment that simplifies, governs and integrates the entire effort. With iterations, the need to manage multiple versions and geographically distributed development, software development teams are well empowered by the IBM Rational software platform.

The platform's powerful tools help manage change with requirements-to-code traceability. It enables organizations to automate, integrate, and govern the core business process of software and systems delivery. The core of the platform is the IBM Rational Unified Process, or RUP, a flexible framework for establishing an iterative business process for software and systems delivery.

With industry leading, and proven tools and processes, IBM Rational enhances your agile, iterative and other application development projects.

The case studies given here are real life accounts of projects undertaken by Tata Consultancy Services for some of their clients from around the globe. They may make interesting reading, and go to prove the capabilities of the Rational Software Delivery Platform.

Customer speak

"With its new Rational and Lotus Software, Persistent Systems can now design and build robust software architectures. These tools increase the efficiency of the product lifecycle, and offer advanced functionality, performance and reliability for the client's software development environment. This enhances customer satisfaction and helps attract new customers."

Sudhir Alekar
Vice President - Business Development
Persistent Systems Ltd.

"The IBM change management solution, IBM Rational ClearCase and IBM Rational ClearQuest, deliver an out-of-the-box process for managing change. This process is based on the configuration and change management best practices observed for decades and harvested from hundreds of successful large-scale implementations."

Vikram Vij
Vice President - Software Centre
Samsung India Electronics Pvt. Ltd.

"Tools like Rational ClearCase from IBM have been extremely useful for our software configuration management. Such tools have helped us expedite and simplify the process of integration, build and release management. Thanks to the IBM team for providing good support!"

Aravind Kamath
Project Manager
Robert Bosch India Ltd.

"Model-based development is becoming mainstream. Thanks to IBM for making available the complete tool chain that reduces modeling time, almost eliminates coding and thereby help us to put more effort and resources into delivering better quality. The strategy to move to Eclipse platform also has enhanced the interoperability of the tools and made the development process more robust and efficient."

Shirish Patwardhan
CTO
KPIT Cummins Infosystems Ltd.

"IBM Rational tools have given Tesco IT a handle on the entire software development lifecycle by providing the tools that make process adherence a breeze. IBM has also been there when we wanted them for consultancy not only on the usage of the tools, but also when we wanted process and tools-deployment related advice. The join-up of Tesco Quality team and IBM has brought Tesco IT's quality of software delivery to the business a long way. Thank you IBM for helping us get where we are today!!"

Y. Raghavendra
Project Manager, Tesco

Contents

Rational. software

Integrating a fragmented quality system

Abstract

Anadocs wanted to adopt software engineering best practices and get CMMI certification. A combination of products and services were provided to enable them manage their quality systems smoothly.

Profile

Anadocs I.T. Solutions Private Limited provides global solutions for its customers. They provide Internet, multimedia, entertainment, software development, E-publishing, data conversion and engineering services to customers worldwide.

Business Issue

The client had a well-documented Quality Management System that addressed the key practices of SEI-CMM and ISO 9001-2000. With an overwhelming flood of information, it was difficult for them to track progress and establish traceability. Specialized tools did not help in deriving a holistic picture or in establishing traceability. Anadocs needed an integrated software engineering toolset.

The Solution

Astra, an IBM® authorised business partner helped Anadocs identify the correlation between CMMI, and software engineering tools from IBM Rational®. Further, Astra helped the client to identify the right tools for each knowledge area, especially considering the best fit and integration capabilities. Besides, a jumpstart on best practices and integration was provided.

The Benefit

Bi-directional traceability, impact analysis, configuration and change management, test automation leading to CMMI without excessive documentation.

IBM Rational Software products

- IBM Rational RequisitePro®
- IBM Rational Software Architect
- IBM Rational Functional Tester
- IBM Rational ClearQuest®

Rational software

Multi-location, multitasking – under one virtual roof

Abstract

CCS Technologies was looking for a software engineering toolset as managing development and delivery, with the teams distributed across many sites, was a complex task.

The appropriate software engineering tools of Rational® were identified and the development team was given a jumpstart into basic concepts.

The benefits included early risk assessment and mitigation. Transparency and control. Development and delivery enabled across many sites.

Profile

CCS Technologies (P) Ltd., is a Software Development and Services company in Kochi, South India. Their presence covers USA, Australia, Qatar, and Dubai.

With over 20 years in I.T. they have matured software engineering and management practices and deliver to world class standards.
CCS has a strong support system with state-of-the-art development centres in Kochi and a dedicated team of 150+ highly skilled professionals.

Business Issue

CCS Technologies was looking for a software engineering toolset spanning requirements gathering, analysis, design and testing. Managing development and delivery, with the teams distributed across many sites was a complex task.

Astra, an IBM® authorized Business Partner, helped them identify the right set of tools and mentored them to the required level of expertise in using these tools for their business.

The Solution

The appropriate software engineering tools of IBM Rational software were identified. The development team was given jumpstart training into basic concepts,

approaches and tools for requirements, analysis, design and testing. Subsequently, onsite and offline support on tool usage and implementation was extended to make sure that the team was able to work on these independently.

The Benefit

- Early risk assessment and mitigation

- Transparency and control on deliverables was offered

- Development and delivery was enabled across many sites with standard and consistent practices across projects

- Other benefits were repeatability, software quality tracking, better control over cost, schedule and functionality

IBM Rational Software products

- IBM Rational RequisitePro®

- IBM Rational Rose®/XDE

- IBM Rational TestManager

- IBM Rational Robot

Rational software

Making the journey simpler to achieve a better destination

Abstract

To integrate and enhance the quality of their software development efforts, CRIS was offered the Rational Suite of products for design, development, quality control, version control, and testing. IBM conducted a number of training sessions for the CRIS employees on ITLM, Rational tools usage and Eclipse Framework to enable them to improve their processes, and quality of their deliverables.

Profile

Center for Railway Information Systems is the umbrella organization for all computer activities for Indian Railways. CRIS is mainly a project-oriented organization engaged in development of major computer systems on the railways. Some of the major projects implemented by CRIS include the passenger reservation system, freight operation information system, coach operation information system, crew management system, parcel management system, E-working application, MIS application, etc. It has close to 700 developers working on a multitude of technologies.

Business Issue

CRIS was developing various central and division-level applications, using a multitude of technologies with little or no processes in place. Each project was using different software development tools. The projects were facing issues in designing and quality control, with numerous versions of the software project floating around. Project level procurement of tools was also causing CRIS a loss in terms of the savings it could achieve through a consolidated procurement.

The Solution

CRIS was offered the Rational Suite of products for design, development, quality control, version control, and testing. IBM also conducted a number of training sessions for the CRIS employees on ITLM, Rational tools usage and

Eclipse Framework to enable them to improve their processes, and quality of their deliverables.

The Benefit

- CRIS achieved improvement in quality, productivity and responsiveness of its project employees

- A suite of IBM® Rational® software was used to standardize development processes, streamline its software development process, and enhance project visibility for its management and customers

Rational software

Through testing times

Abstract

The client required intensive testing to be performed ensuring uncompromised test coverage. Accomplishing this manually was extremely difficult considering the hectic pace of changes.

IBM® Rational® Functional Tester was identified as the right test automation tool as it provided a powerful solution with a combination of ScriptAssure, regular expressions and Java programming language.

Profile

IBS Software Services Pvt. Ltd. specializes in providing software solutions for airline operations, airport management, cargo and logistics, oil and gas logistics, transportation, travel and cruise.

With a workforce that's over 1200 strong, they are present in all the major geographies. 11 offices are spread across USA, Europe, the Middle-East and the Asia Pacific region. Over 70 top global corporations form the client base.

IBS is a CMMI Level 5 and PCMM Level 5 company, with development centres in Trivandrum and Kochi.

Business Issue

As an organization with inherent quality focus, IBS required intensive testing to be performed ensuring uncompromised test coverage. Accomplishing this manually was extremely difficult considering the hectic pace of changes.

The application had a lot of custom controls on Graphical User Interface which were not recognized by most commercial testing tools. Also, the controls were created dynamically which posed additional challenges in their recognition.

The Solution

Astra, the IBM authorized Business Partner, worked closely with IBS Software Services Pvt. Ltd. for over four years, to create the solution. IBM Rational Functional Tester was identified as the right test automation tool as it provided a powerful solution with a combination of ScriptAssure, regular expressions and Java programming language.

Astra provided consultants and tool specialists to troubleshoot, and resolve typical test automation issues.

The Benefit

Nearly 80 percent of test cases that were automated provided unprecedented test coverage. The test suite is being regularly used for regression testing for over 20 versions now.

IBM Rational Software product

- IBM Rational Functional Tester

Rational. software

Bringing every little detail into the big picture

Abstract

Managing frequent changes to the large code base was a formidable challenge. New configuration and change management was established based on Unified Change Management using IBM® Rational® ClearCase®. The challenges of transition to the new system, without affecting routine work, was resolved by software engineering services from Astra, an IBM authorized business partner.

Profile

IBS is a multi-locational CMMI Level 5 and PCMM Level 5 company. Their development centres in Thiruvanathapuram and Kochi, have over 1200 people. IBS has presence in every major geography. The company specializes in airline operations, airport management, cargo and logistics, oil and gas logistics, transportation and travel and cruise.

Business Issue

The existing version control system could not address the many challenges the business threw up such as managing ongoing product development and catering to continuous demands of changes.

The challenge included undertaking simultaneous changes for product customization for multiple customers, addressing the demand for new features and enhancements, and fixing bugs while supporting existing customers. This was complex considering that the development team was distributed across the cities of Thiruvanathapuram and Kochi.

The transition to the new solution was extremely risky at that point in time as products were in use by different customers and many changes were in progress under high delivery pressure. The transition therefore would require to be done with the least disturbance to the development work.

The Solution

Unified Change Management was identified as critical to solving the problem of managing changes in such an environment. Files from Microsoft Visual Source Safe were migrated to IBM Rational ClearCase. Further, it was extended with use of IBM Rational ClearCase MultiSite®. Developers and administrators were trained on the tool usage. As a confidence building measure, mentoring and handholding services continued for a month, gradually disconnecting to ensure knowledge transfer and smooth transition.

The Benefit

- Parallel development was enabled across locations.
- Management of development and integration streams improved
- Change proposition was from one stream to another was more effective.
- Automated build process was provided, including reuse of ANT build scripts.
- Traceability was established between change request and change set.

Rational software

Legacy systems converted to cutting-edge effectiveness

Abstract

"We really appreciate the support and flexibility shown by the IBM team in helping us arrive at the appropriate solution and also ensuring that we get the best and the most viable option to acquire the same."

– Krish Anand
CTO

Profile

Indecomm Global Services, a leading business process service provider, offers customers cutting-edge technology and industry-proven processes using onsite, onshore and offshore delivery resources. Services include data capture, data management and workflow automation. Indecomm is also considered a leading developer of Business Process Management and enterprise content management solutions. Their customers come from the banking, financial services, retail, benefits administration and healthcare industries.

Business Issue

Indecomm needed to standardize its internal I.T. processes on a robust, scalable and extensible platform, as it sought to leverage its existing assets for new customer engagements.

By reusing existing processes and software modules, the company could speed development times and improve overall customer satisfaction. However, Indecomm had been running its entire I.T. application platform on an outdated Microsoft platform. Because the applications had limited integration capabilities, they behaved like silos. Indecomm was facing performance problems, and it was unable to efficiently handle distributed workloads.

The Solution

IBM designed an automated process runtime engine through which Indecomm mapped, choreographed and deployed all of its internal business processes with the necessary process workflows. Indecomm's insurance claim, home loan

approval, account initiation, bank check truncation and inter-bank delivery and reconciliation processes all reside on the automated process runtime engine. The client uses Web services and a Service-Oriented Architecture (SOA) to integrate its existing applications with the new process.

The Benefit

Indecomm has realized significant process improvements and an increase in customer satisfaction. Access to cutting-edge tools, easier integration points and shorter development cycles has led to increased market share and robust, error-free applications.

By standardizing on an open-standards-based SOA infrastructure for its business process framework, Indecomm gained the ability to easily integrate its existing applications into its new process server, which allows the company to avoid complex and expensive application redevelopment. Indecomm's enhanced, robust infrastructure allowed the company to gain additional market share and target larger customers who have more complicated needs. And by leveraging and reusing its existing assets, processes, expertise and best practices, Indecomm maximized its value to customers.

IBM Rational Software products

Rational Software:

- IBM Rational Application Developer for WebSphere Software

- IBM Rational ClearCase

- IBM Rational ClearQuest

- IBM Rational Rose Enterprise.

WebSphere Software:

- IBM WebSphere Business Modeler

- IBM WebSphere Business Monitor

- IBM WebSphere Integration Developer

- IBM WebSphere Process Server

Rational® software

Helping the navigate an ocean of information

Abstract

Information Kerala Mission is a flagship eGovernance project of the Government of Kerala. Requirements for the project were based on practices set by numerous Government orders and amendments, and localized practices at various Government offices.

The need was to formulate document requirements to cater to analysis at varying levels of details. Business modeling using use case based approach was adopted and IBM® Rational® RequisitePro® and IBM Rational Rose® were used as software engineering tools to support it. This helped in retaining the big picture and local variations, without them affecting one another.

Profile

Information Kerala Mission is the flagship E-governance project of the Government of Kerala. It is an attempt to strengthen local self-governance through Information and Communication technology applications.

It is the largest and most comprehensive computerization project by a local body in the Country. It envisages computerizing and networking the 1215 local self-government institutions in Kerala through a phased transformation of the existing systems to new ones. It addresses the entire gamut of issues concerning local body governance, decentralized planning, and local economic development.

Business Issue

One of the major challenges faced in this project was to gather, document and reconcile data from various sources like Government orders, amendments and local practices as derived from discussions and interviews. Formulating and documenting requirements was a formidable task.

The need was to formulate document requirements to cater to analysis at varying level of details. For example, distribution of pension as per Government orders, subsequent amendments and process followed at the local unit.

The Solution

IBM Rational RequisitePro was identified as a requirement management tool that works with Microsoft Word, and is provided with analytical capabilities. Government orders and amendments were studied and documented using IBM Rational RequisitePro, permitting analysis at varying levels of details.

The Benefits

Managing complexity of requirements.

IBM Rational Software products

- IBM Rational RequisitePro
- IBM Rational Rose

IBM

Rational. software

Smarter software development

Abstract

Managing quality in the core product, when enhancements were made during software development, was a difficult task. Addressing specific requests for customization from many customers was also taxing.

Requirement-based testing supported by the right level of test automation was adopted as a solution. Measurable test coverage was provided and an unprecedented level of testing was delivered. Additional benefits were better test coverage, and a predictable and reproducible test effort.

Profile

As a pioneer and the world's leading provider of plantation management solutions, iSmart Business Solutions Private Limited, has won prestigious clients across 14 countries.

It commenced operations in 1987 and 700 installations later, iSmart has over 1100 man-years of experience to its credit.

Fuelled by domain knowledge, iSmart provides end-to-end solutions that makes the entire agri-business process far simpler, seamlessly integrated and more profitable. The Company has built for itself a global reputation for quality and dependability.

Business Issue

Managing quality in the core product, when enhancements were made during software development, was a formidable task. Addressing specific requests for customization from many customers was also taxing. As the number of installations increased, it became more and more complex. Fixing bugs and delivering to schedule also became a challenge.

The Solution

Requirement-based testing supported by the right level of test automation was adopted as a solution. Light modeling was done to help enhance communication

from the business analyst and designer to the tester. IBM® Rational® RequisitePro® was used for requirements gathering and IBM Rational XDE was used for modelling.

IBM Rational XDE models were connected to extensive design documentation available in visio and .chm files. A combination of IBM Rational TestManager and IBM Rational Robot was used for test automation. Astra, the IBM authorized Business Partner, supplied manpower to quickly create the initial set of scripts and to reduce the effort on manual testing.

The Benefits

- Measurable test coverage was provided
- An unprecedented level of testing was delivered
- Better test coverage, and a predictable and reproducible test effort

IBM Rational Software products

- IBM Rational RequisitePro
- IBM Rational XDE
- IBM Rational Test Manager
- IBM Rational Robot

Rational software

Distributed team, integrated development

Abstract

With projects all over the world Nucleus Software needed to utilize their every development resource. The need was for a software asset management solution that was flexible, scalable and configurable to support parallel development. IBM® Rational® ClearCase® and IBM Rational ClearCase Unified Change Management provided a seamless solution.

Profile

Nucleus Software is a leading global software powerhouse providing innovative and pioneering products and software solutions to the banking and financial services industries since 1986.

Business Issue

Nucleus started out by building software locally, in an environment in which everyone on the team was in close proximity. After exponential growth for 3 years, and product implementation sites spanning 25 countries and 125 customers, to use all of the capabilities of the distributed team to its full advantage, Nucleus realized the requirement for a software asset management solution.

The need was to enable team members with the necessary skills to work on any project that required them, regardless of location. Moreover the solution had to be flexible, scalable, and configurable to support effective communication, parallel development and sharing of assets among multiple sites.

The Solution

IBM Rational ClearCase provided flexibility and scalability that allowed Nucleus to staff development projects with skilled resources regardless of their physical location.

IBM Rational ClearCase Unified Change Management (UCM) provided a strong framework to support product development and implementations by automating the complete configuration management process.

With the help of triggers, the framework provided system generated control points and automated e-mail communication to stakeholders at pre-defined milestones of the software lifecycle.

The Benefit

- Parallel development
- 24x7 development
- Integrated framework, accessible within IDEs
- Team productivity improvement
- Defect reduction
- Increased asset reusability further leading to reduction in maintenance cost during production support
- Benefits from reduction in process non-compliance on account of configuration management, reflecting higher process maturity

IBM Rational Software products

- IBM Rational ClearCase

Rational software

Better alignment for better deliverables

"We are using multiple tools from IBM like ClearCase, ClearQuest and Lotus Notes and it has really helped in giving us more depth to our I.T. in terms of solutions development and messaging solutions much better than the other products available in the market."

– Gaurav Jetly
Release Management,
AIS, IT&S

Profile

Orange Business Services develops innovative solutions and communication services designed for businesses throughout the world. Areas of activity cover small businesses, local authorities, key accounts, and multinationals. Voice, data, and mobile services, along with information system expertise and managed services, are designed to transform business processes and improve their productivity.

Orange Business Services has presence in 166 countries and territories, they serve customers in 220 countries.

Business Issue

Re-aligning the configuration and source code activities to enhance the quality of deliverables.

The Solution

IBM® tools like ClearCase® helped in realigning configuration and source code activities. This helped in shaping final deliverables to external and internal customers.

ClearQuest® defect tracking features are able to define the escalation matrices, provide clear accountability and enhanced KPI's with respect to its defect-request feature.

The Benefit

Client was able to provide deliverables with improved quality and greater depth.

IBM Rational Software products

- IBM Rational® ClearCase
- IBM Rational ClearQuest®

Rational. software

The next level of continuous development

Abstract

The client wanted to improve their process of continuous improvement. The right set of tools were identified and client personnel were mentored to the required level of expertise.

Onsite and offline support on tool usage and implementation was extended. Client achieved an unprecedented level of testing accuracy.

Profile

Premier Evolvics Pvt Ltd, is a part of the USD 150 million Premier Mills group, located in Coimbatore, India. From 1983 to 1996, their manufacturing was under license from Zellweger Uster AG, Switzerland. And from 1996 onwards, Premier independently developed, manufactured and marketed its products to the textile industry worldwide.

They provide a complete range of solutions for the textile industry to improve quality and productivity. Focus is on select aspects of manufacturing: Fiber Testing Equipment, Yarn Testing Equipment, Yarn Clearing Systems, On-line Quality And Production Monitoring Systems (for Spinning & Weaving), and Mill Management Solutions.

Business Issue

The client needed to enhance their process of continuous improvement. While they had made significant progress in hardware, the software required significant improvement and consolidation of development process. Astra, the IBM® Business Partner, helped them identify the right set of tools and mentored them to the required level of expertise in using these tools.

The Solution

The software engineering tools used were IBM Rational® RequisitePro®, IBM Rational Rose®, IBM Rational TestManager, IBM Rational Robot, IBM Rational ClearQuest®

and IBM Rational ClearCase®. The development team was given a jumpstart into basic concepts, approaches and tools for requirements, analysis, design and testing.

Subsequently, onsite and offline support on tool usage and implementation was extended to make sure that the team was able to work on these independently.

The Benefit

- Unprecedented level of testing accuracy
- Control on requirements gathering and change management
- Well established software development process
- Development team empowered with state-of-the-art IBM Rational tools

IBM Rational Software products

- IBM Rational Unified Process®
- IBM Rational RequisitePro
- IBM Rational Rose
- IBM Rational TestManager
- IBM Rational Robot
- IBM Rational ClearQuest
- IBM Rational ClearCase

Rational. software

Bringing clarity to change

Abstract

The customer had to deal with a lack of clarity, while managing change and version control. IBM® Rational® ClearCase® was appropriate as an enterprise configuration and change management solution. The results were improvements in productivity and management.

Profile

Robert Bosch India Limited is a 100% owned subsidiary of Robert Bosch GmbH, with over 3500 associates. Robert Bosch India provides engineering and business services to the Bosch World, such as development of Electronic Control Units for automotive, industrial, consumer goods and building technology. And I.T. services, process consulting, mechanical engineering, VLSI services, shared services accounting, and translation/ documentation.

Business Issue

Customer had to deal with grey areas while managing change and version control. The customer was moving towards Globally Distributed Development (GDD).

The Solution

IBM Rational ClearCase proved to be right, since an enterprise configuration and change management solution was required.

The Benefits

Improvements in productivity and management.

Rational. software

Providing powerful test automation solutions

Abstract

Product was Java/ J2EE applications, with custom - made browser using Internet Explorer components. Changes in the user interface look and feel depended heavily on the customer. IBM® Rational® Robot was identified as the right test automation tool as it provided a powerful solution with its combination of object - oriented recording and SQABasic as scripting language. Astra, an IBM business partner working very closely with the customer for over 4 years, helped the customer in identification of the tool, proof of concept solution, training, mentoring, scripting and supply of trained manpower.

Profile

SunTec is a leading provider of relationship-based pricing and centralized billing solutions for banking, financial services and insurance, communication, media & entertainment and utilities industries.

Their product offerings, provide comprehensive solutions for measuring and monitoring transaction value, enabling tighter control on profitability.

A CMMI Level 5 and PCMM Level 5 company, SunTec has global presence and development centres in Thiruvananthapuram.

Business Issue

As an organization with inherent quality focus, SunTec's product is required to be tested intensively, and uncompromisingly.

The software had a highly configurable and customizable interface, to cater to the needs of various industries. Doing this consistently every time through manual methods was extremely difficult.

The client's product testers had been using a competitive product for over a year, but the client was not able to attain the desired level of test automation. This was because the user interface was not a standard browser but a custom-made one created using Internet Explorer components. Commercial tools had difficulty in working with the user interface controls, resulting in inconsistent playback. This affected test script resilience, thereby defeating the very purpose.

Knowledge of testing was limited to a few very senior, critical resources and many of them had other responsibilities as well.

The Solution

Astra, an IBM authorized business partner, was working with the customer for more than 4 years. They helped the customer to identify the right tool that would be easy to learn and provide significant script resilience. IBM Rational Robot was chosen as the right tool and SQABasic as the scripting language made learning easy. The object-oriented capabilities provided good test script resilience.

Astra provided initial training and subsequently extended mentoring services to guide the specific usage of tools and resolve major technical issues. Further, Astra provided manpower to create the initial set of scripts and make new ones as functionalities were added.

The Benefit

The testing team's performance was enhanced with both manual and automated testing being done in-house.

Rational software

Switching tracks to evolved best practices

Abstract

The software development unit in Bangalore wanted to adopt software engineering best practices and get CMMI certification. Consulting services provided were analysis, design, estimation, testing, change and configuration management, tool support, and customization of IEEE and RUP® templates.

Profile

Union Switch and Signal Inc., is a leader in the design, manufacture and service of signaling, automation and control equipment, besides systems for the railroad and mass transit industries worldwide. Their mission is to help rail-based freight, passenger, and metropolitan rail transit customers increase the safety, capacity, reliability, and efficiency of their operations. US&S is a wholly-owned operating subsidiary of Ansaldo Signal N.V. which is owned by Finmeccanica SpA, one of Italy's industrial holding companies with global operations in the aerospace, defense, energy, transportation and automation sectors.

Business Issue

A small software development unit wanted to adopt software engineering best practices as part of their endeavor for continuous improvement and acquiring CMMI certification. Doing this without integrated software engineering toolset had lead to excessive documentation and islands of redundant information.

However, achieving proficiency in best practices required continuous mentoring with experts having specialized knowledge of CMMI, IEEE standards, and software engineering best practices and toolsets.

The Solution

Initial training was provided on object oriented analysis and design, and software testing concepts and techniques. Not to forget software size, cost and effort estimation employing use case point, followed by software change and configuration management. Other support provided by Astra, an IBM authorised business partner included usage of related IBM® Rational® tools. E-mail and telephone support along with onsite review.

The Benefits

The organization attained CMMI level 3 certification. Internal confidence in Bangalore got a tremendous boost and resulted in more projects pouring in.

Rational software

A development environment as robust as a gym

Abstract

"With the new Rational and Lotus software, Persistent Systems can now design and build robust software architectures. These tools increase the efficiency of the product lifecycle, offering advanced functionality, performance and reliability for the client's software development environment. Thereby enhancing the satisfaction of our customers and helping us attract new customers."

– Sudhir Alekar
Vice President
Business Development
Persistent Systems Ltd

Profile

Persistent Systems Limited has been recognized as one of the leading technology companies in the Technology Fast 50 India 2006 program conducted by Deloitte Touché Tohmatsu, Asia Pacific.

Persistent offers their customers the benefits of offshore delivery. They deliver services across all stages of the product life cycle, which enables them to work with a wide range of customers and develop, enhance and deploy customers' software products.

Persistent have created an innovative suite of time-to-market accelerators and tools that give their customers a competitive advantage. The company has competency centers in telecom and wireless, life sciences, analytics and data infrastructure, embedded systems domains and product engineering.

Business Issue

Persistent required tools to design and build robust software architectures. Tools that would increase the efficiency of the product lifecycle, offer advanced functionality, performance and reliability for the client's software development environment.

The Benefit

IBM's solutions helped Persistent Systems Limited to increase the efficiency of product lifecycle, offering advanced functionality, performance and reliability for

the client's software development environment. This in turn enhanced the existing

customer satisfaction and helped attract new customers.

IBM Rational Software products

- IBM Rational ClearCase

- IBM Rational ClearQuest

- IBM Rational Requisite Pro

- IBM Rational Functional Tester

- IBM Rational Performance Tester

- IBM Rational Team Unifying Platform

IBM

Rational software

Providing a touch of turbo to product acceleration

Abstract

"Model-based development is becoming mainstream. Thanks to IBM for making available the complete tool chain that reduces modeling time, almost eliminates coding and thereby helps us to put more efforts and resources into delivering better quality. Moving to the Eclipse platform also enhanced the interoperability of the tools and made the development process more robust and efficient."

– Shirish Patwardhan
CTO
KPIT Cummins
Infosystems Ltd.

Profile

KPIT Cummins Infosystems Ltd., is a global I.T., engineering and BPO services partner of choice for customers across the globe. KPIT partners with global automotive and semiconductor corporations in bringing products faster to their target markets and endeavors to be #1 in IP-led advanced technology solutions for the automotive industry.

KPIT has been recognized as one of the fastest growing in the 'Deloitte Technology Fast 50 India' program. International Association of Outsourcing Professionals ranked it a leading player in global outsourcing.

Business Issue

KPIT wanted to reduce development time, become cost effective and deliver better quality, to help them serve customers better.

The Solution

Primarily RAD, RSA and WebSphere Business Modeler.

The Benefit

IBM's solution helped KPIT Cummins to reduce modeling time. The solution almost eliminated coding, thereby helping KPIT to channelise their efforts and resources to delivering better quality.

IBM Rational Software products

- IBM Rational Software Architect
- IBM Rational Application Developer
- IBM WebSphere Business Modeler

Rational software

A local upgrade has a global impact

Abstract

With globally widespread development activity, the client's project groups were using a competitor's products to support their application development efforts. This had led to problems with the organization's development lifecycle, application functionality and time-to-market. IBM Rational tools provided enhanced support for the geographically distributed development. The user-friendly integration points reduced the application development cycle and improved time-to-market of highly functional new applications.

Profile

Bangalore-based Fidelity Business Services India (P) Ltd., is the I.T. and BPO division that supports Fidelity Management & Research Company.

It provides research and Information Technology assistance to the global operations of its parent, Fidelity International. Established in 2001, the firm employs around 7,000 people across three offices.

Business Issue

Operating in many different geographies, the organization's project groups had been using a competitor's products to support their application development efforts.

But use of the competitor's software had led to problems with the organization's development lifecycle, application functionality and time- to-market. The client required a software upgrade that would improve the efficiency and quality of its application development processes.

The Solution

The client transformed its development processes by gradually deploying a comprehensive software development lifecycle solution.

A solution that was based on an extensive suite of flexible and open J2EE-based IBM Rational software, which boosted the company's application development and rollout capabilities.

The development team used the IBM Rational Application Developer for WebSphere Software to support an Integrated Development Environment for J2EE-based applications. Using the same application they also supported an SOA project. And by enabling existing and new services to communicate, the SOA allowed Fidelity to align its I.T. assets with its business objectives.

The Benefit

IBM Rational tools provided enhanced support for the geographically distributed development. The user-friendly integration points reduced the application development cycle and improved time-to-market of highly functional new applications. Besides, the solid solution framework and the robust, error-free applications increased user satisfaction levels.

IBM Rational Software products

- IBM Rational Application Developer for WebSphere Software
- IBM Rational ClearCase
- IBM Rational ClearQuest
- IBM Rational Functional Tester
- IBM Rational Performance Tester
- IBM Rational RequisitePro
- IBM Rational SoDA
- IBM Rational Software Architect
- IBM Rational TestManager
- IBM Rational Rose Enterprise

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