Rational® software

Reenergize your call center operations.

*Create happier customers and more productive customer
service representatives with IBM Rational HATS software*

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Contents

Introduction

How many times has this happened to you: You call a company to update your account information or check the status of an order you've placed, and you end up getting the runaround. Instead of talking to a person, you have to navigate a voice-response unit. And when you finally do connect with a customer service representative (CSR), you have to repeat all the information you've already given and then wait for the representative to find the answers to your questions. Imagine how much happier you would be and how much more productive the CSR would be if all your relevant information was readily available when you called. Or better yet, what if you could open a Web browser and update or retrieve the information yourself?

You know how frustrated *you* get. Now consider what *your customers* face. Do your CSRs need to navigate through several green-screen applications to perform simple tasks like checking order statuses? You know all too well that these types of inefficient processes can add up to reduced customer satisfaction, lost sales, frustrated CSRs and high staff turnover rates. If your company faces these challenges, chances are it's for good reason. Perhaps budgetary restrictions or technical limitations have prevented you from streamlining your call center operations. Or maybe you just don't know where to turn.

Part of the suite of IBM Enterprise Modernization solutions, IBM Rational® Host Access Transformation Services (HATS) software delivers tools to help you build integrated Web applications from your existing terminal applications, enabling you to streamline your call center processes without having to replace your existing applications. Because Rational HATS enables you to create a standard Web application interface, your CSRs can access green-screen applications using a standard Web browser. You can then extend selected functions of your green-screen applications to intranet, extranet and Internet users. For example, you can use Rational HATS software to create an integrated Internet self-service Web site where customers can enter information and queries to reduce the number of calls coming in to the call center, which can help alleviate customer frustration.

This paper explains how Rational HATS can help you modernize your existing green-screen applications to streamline your call center operations. It also introduces a customer case study that highlights the compelling productivity gains and cost savings you could potentially realize from adopting a Rational HATS solution.

Legacy applications and call center challenges

If your call center is like most, then you likely face the following issues:

Today's call centers can be challenged by older applications with nonintuitive interfaces that stifle productivity.

- *Information such as billing status, orders, account history and previous calls is scattered throughout several disparate applications, requiring CSRs to switch applications and screens several times to complete a single customer call.*
- *Older applications with nonintuitive interfaces may require that CSRs enter information, such as account numbers and entry codes, multiple times, diminishing productivity and potentially contributing to high error rates.*

Rewriting or replacing existing applications can be expensive and risky.

You've probably invested a significant amount of time and money in your customer support applications and the systems that depend on them, tailoring them to your business over many years. Rewriting or replacing these applications can be expensive and even cost-prohibitive. Plus, rewriting an existing application can introduce stability, reliability and dependability risks.

The key to improving the overall productivity of call center operations and, therefore, customer satisfaction is to simplify the interfaces to your existing applications, making it easier for CSRs to do their jobs. By improving the interfaces to your existing applications, you can help reduce average call times and costs, as well as help reduce CSR training time.

IBM Rational HATS software enables you to transform the interface to your existing applications.

Typical call center applications require users to navigate through numerous screens to get to the information they need.

Improving the appearance and usability of green-screen applications

IBM Rational HATS has helped many companies address the call center challenges presented by older application interfaces. With Rational HATS, you can transform the CSR experience without changing your applications. By creating screen customizations and macros, which are XML scripts that define a set of screens and the actions users need to take on those screens, you can improve the appearance and usability of existing applications and make them easier to navigate. You can also extend access to the applications to new users, such as customers or suppliers, with low development costs.

For example, a typical call center application might require that users navigate through all of the screens shown in figure 1 to get to customer account information.
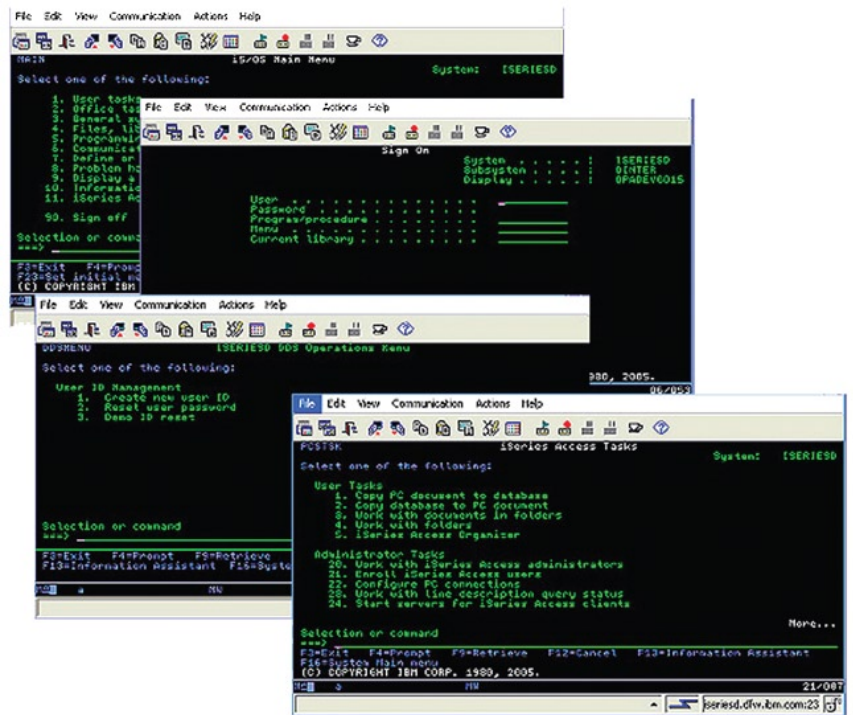

Figure 1: A typical call center application. User interface design has come a long way since these applications were developed, but it's often too expensive to develop new applications.

Using Rational HATS, you can transform the screens from figure 1 into a Web page that's much easier to navigate, as shown in figure 2.
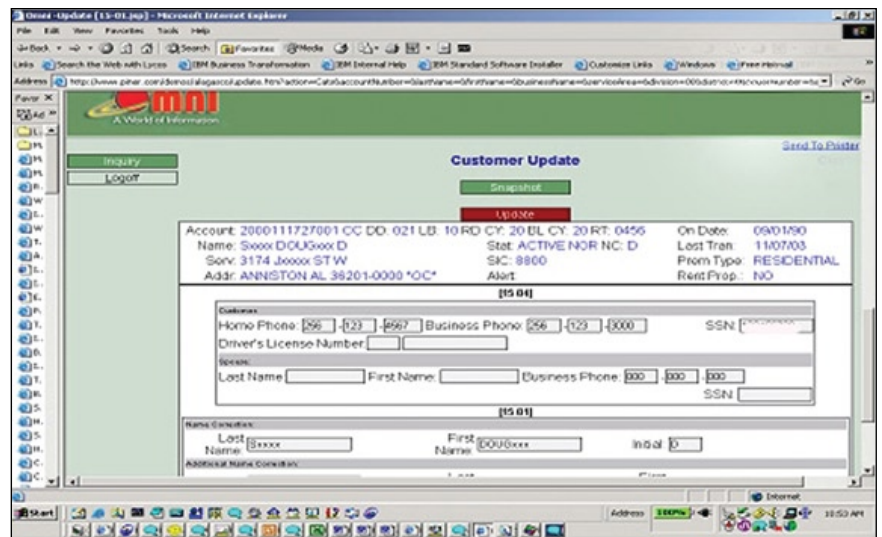

Figure 2: Using Rational HATS, you can transform older, green-screen applications into modern, Web-based applications.*

Rational HATS enables you to transform green-screen applications into intuitive Web-based applications.

Rational HATS enables you to:

* *Render information from your green screens to a Web page that matches your corporate style.*
* *Use macros to combine multiple screens into a single Web page.*
* *Use macros to skip over unnecessary screens or to enter information for multiple host screens obtained from one Web page of user inputs.*
* *Enhance the usability of your application screens by adding widgets, such as drop-down lists, radio buttons, check buttons, macro buttons and calendars.*
* *Use these widgets to reduce errors when entering commonly used information such as order codes, country and state names, and dates.*
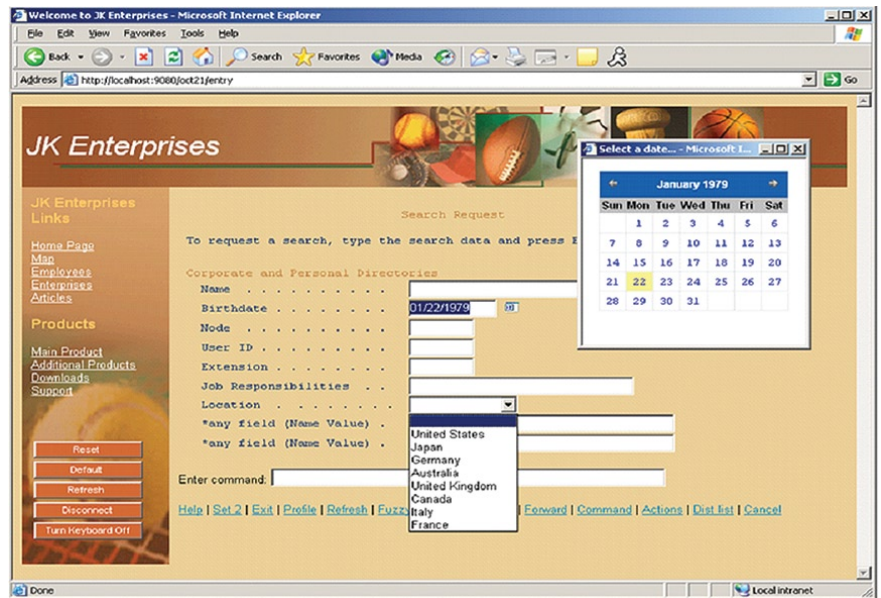
Figure 3: Application enhancements, such as calendar widgets and drop-down lists, can help reduce data entry errors.*

Rational HATS includes a number of features, such as single-sign-on functionality, that make it easier for users to interact with existing applications.

Using global variables, you can store a value, such as the customer account number, that will exist throughout the lifetime of a browser session and can be entered automatically via a Rational HATS screen customization or macro, further reducing manual entry errors. In addition, the Web Express Logon (WEL) feature of Rational HATS enables single sign-on, so CSRs don't have to log on multiple times when switching between applications.

Wizards and editors in Rational HATS Toolkit software guide you through the process of creating and modifying Rational HATS applications.

The Rational HATS run time includes a set of servlets and classes to manage connections, track users and monitor their interactions.

A closer look at IBM Rational HATS software

Rational HATS consists of two components: a development toolkit and a run-time environment.

IBM Rational HATS Toolkit software provides a set of wizards and editors that guide you through creating and modifying Rational HATS applications. The toolkit is integrated with the Eclipse-based IBM Rational Software Delivery Platform, which includes the Java™ Platform, Enterprise Edition (Java EE) platform along with multiple integrated test servers. The Rational platform enables you to develop and test full-function applications that match your corporate look and feel in one development environment before deploying them to your production server. If you want to deploy directly to the IBM WebSphere® Application Server environment, you can package the Rational HATS application as a Java EE enterprise archive (EAR) file. For deployment to the IBM WebSphere Portal Server environment, you can package the Rational HATS application as a Web archive (WAR) file.

The Rational HATS run time is a set of servlets and classes automatically packaged with the Rational HATS application. The run time:

- *Manages connections to the telnet servers for the terminal applications you're transforming.*
- *Tracks users and their interactions with one or more Rational HATS applications.*
- *Provides a transformation servlet, or a Rational HATS entry servlet, that processes requests from users and dynamically transforms terminal data to HTML. Transformations are based on the request, the screen received from the terminal application and the customizations the developer defines.*
- *Provides an administrative console servlet that enables connection management and problem determination for one or more Rational HATS applications.*

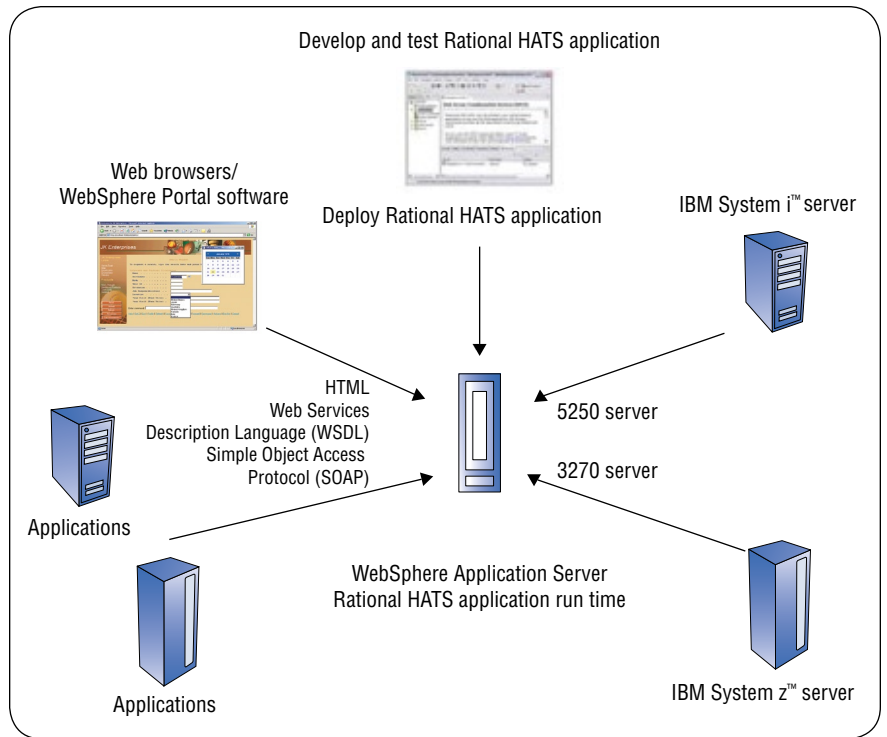Develop and test Rational HATS application

Web browsers/
WebSphere Portal software

Deploy Rational HATS application

IBM System i™ server

HTML
Web Services
Description Language (WSDL)
Simple Object Access
Protocol (SOAP)

5250 server

3270 server

Applications

WebSphere Application Server
Rational HATS application run time

Applications

IBM System z™ server

Figure 4: This is a typical configuration to develop, test and deploy a Rational HATS application.

By modernizing your applications with Rational HATS, you can help make your call center more efficient, potentially improving personnel productivity and reducing training costs.

Benefits of a Rational HATS solution

Rational HATS software enables you to streamline your call center operations and help make your CSRs more efficient without rewriting your current applications or spending the time and money to implement a packaged solution. By increasing personnel productivity, reducing training costs and decreasing staff turnover, you can save significant amounts of money each year. Further, by using Rational HATS to reduce keystrokes and improve workflow, you can potentially decrease your customer call time. Lastly, by employing a different set of rules for your CSRs and external customers, you can offload calls from your call center, letting your customers help themselves and saving you even more in support costs.

Highlights

One company was able to realize significant savings by using Rational HATS to improve the interface to its call center application and build a self-service Web site to reduce call center calls.

A typical company's call center savings†

The company's customer service call center:

- Handles billing inquiries, customer complaints, changes of service and scheduling maintenance.
- Employs 230 people.
- Has an annual employee turnover rate of 20 percent, which results in 46 new employees per year.
- Handles 10,000 calls per day.
- Averages 44 calls per employee per day, translating into 5.4 calls per hour per employee.
- Has an average call length of 11 minutes.
- Pays employees an average of US$25,000 plus 20 percent for burden, totaling US$30,000 per employee and US$6,900,000 for all 230 employees.

By streamlining its application navigation using Rational HATS software, the call center could:

- Reduce keystrokes and workflow steps by 10 percent.
- Reduce emoployee turnover, resulting in fewer new employees per year, saving even more in annual training costs.
- Decrease manual entry errors, which helps increase customer satisfaction.

Using the improved Rational HATS interface, a real company's call center:

- Saved 0.5 minute per call (5 percent), resulting in a US$345,000 reduction in labor costs per year.
- Reduced CSR training time from 12 weeks to 2 weeks, saving US$577 per week per new employee, for a total of US$265,420 per year.

By building a self-service Web site using Rational HATS software, the company was able to:

- Offload 8 percent of call center calls to the self-service site, saving US$552,000 in labor costs.

Total yearly savings: US$1,162,420

† Any savings data contained herein was determined in a controlled environment. Therefore, the results obtained in other operating environments may vary significantly. There is no guarantee that you will realize these savings. Acutal results may vary. Users of this document should verify the applicable data for their specific environment.

Highlights

Faced with a growing customer base and seasonal spikes in customer calls, a major gas company in the United States leveraged Rational HATS to modernize its call center applications.

IBM Business Partner Mainline Information Systems showed the company how Rational HATS could address its challenges as well as, or better than, other solutions—at a fraction of the cost.

A major gas company uses Rational HATS software to reduce its average customer call time by 30 seconds per call

With help from IBM Business Partner Mainline Information Systems, a major gas company in the United States turned its customer service around by using Rational HATS to modernize its customer service call center application.

With a growing customer base, price changes and seasonal spikes in customer calls, the gas company found it difficult to provide quality customer service. Making matters worse, its existing solution had a steep learning curve that frustrated new employees. The application included more than 500 screens of data, requiring employees to constantly switch between screens because the application did not have the information employees needed organized in an easily accessible manner. As a result, new CSRs needed three months of training before they were able to use the application effectively.

When Mainline Information Systems provided the gas company with a demonstration of Rational HATS, the company's manager of enterprise applications realized that the software could meet its call center needs as well as, or better than, other solutions the company had evaluated—at a fraction of the cost. Mainline Information Systems showed that Rational HATS could solve the client's call center problems by taking critical information in legacy systems from green screens to an easy-to-use Web interface. Users could then easily navigate the database and quickly access and view information. In addition, Rational HATS could help reduce the three-month learning curve that the company's previous solution had required its users to endure.

Highlights

The gas company used Rational HATS to gather information from 12 to 15 different screens and present it in one easy-to-navigate interface.

Using Rational HATS, the gas company reduced its average call time by 30 seconds, which means that the company's existing staff can handle 18 percent more calls.

Part of a comprehensive line of enterprise modernization solutions, Rational HATS can help you get the most value from your existing call center applications.

The company deployed WebSphere Application Server software on its Microsoft® Windows® 2000 system and used Rational HATS to streamline its 3270 green-screen applications. Using HATS macros, the gas company gathered information from 12 to 15 different screens and presented it on one easy-to-navigate interface. After the CSR enters the customer's account number on the main screen, Rational HATS accesses and combines all the pertinent data for that customer, such as the highest bill, account summary, service calls and payment options.

The company was very pleased with the results. The CSRs reported an almost-immediate understanding of the application. The most frequently accessed information can be viewed with tabs, making it simple for representatives to locate data and answer questions without bouncing between screens.

The major benefit of the solution to the gas company is a reduction in the average duration of customer calls. Using Rational HATS, the company was able to reduce its average call time by 30 seconds. That improvement relates to an 18 percent reduction in average call time. The customers get results sooner and the fast-growing gas company can handle 18 percent more workload with its current staff.

Summary

Part of the comprehensive line of IBM Enterprise Modernization solutions, the Rational HATS solution can help you get the most value out of your existing call center applications. Using Rational HATS, you can transform unwieldy green-screen applications into more intuitive Web-based applications that can streamline your call center processes and ultimately help improve your customer service. IBM has a track record of successfully helping companies modernize and transform their legacy call center applications. Take advantage of IBM's expertise to stream-line your call center operations without replacing your existing applications.

For more information

To learn more about how you can leverage IBM Rational HATS software to modernize your existing applications and streamline your call center operations, contact your IBM representative or IBM Business Partner, or visit:

ibm.com/software/awdtools/hats