Optimizing BMC’s Remedy ARS with Microsoft OBAs, .Net and Web services

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Summary:
To extract more value out of existing Remedy ARS (Action Request System) is by adding new features, improving usability and creating interfaces to other enterprise applications. A fast, low cost and flexible way of achieving this by using custom components built using Microsoft .Net, Web services and OBA (Office Business Application) technologies. When the native feature set or responsiveness of a Remedy system falls below expectations, or when cost is a disincentive to upgrading Remedy-native features, iLink can provide the ideal solution using .Net, Web Services and OBAs.

Background
Enterprise applications are designed to reliably execute missions that are critical to the infrastructure of successful companies. Once implemented and adopted, enterprise apps should deliver a long list of benefits, including improved productivity, reduced business risk, and increased ROI. But typical installations of enterprise applications tend to become unwieldy and cumbersome to add new functionality and inaccessible for other enterprise applications to interface with them.

Like all software, Enterprise Applications must prioritize a number of non-functional requirements in order to successfully compete for customers (see Figure 1, below). Enterprise applications as a class have acquired a reputation for poor usability. In such cases where the poor reputation is deserved, system operators face the thankless task of finding ways to improve usability without blowing up their budgets or trading the stability of their current system for the risk of a “rip and replace”.

In recent years this terrain has been entirely re-landscaped by tools such as Microsoft’s Office Business Applications and custom .NET components & web services that expand the extensibility, functionality and usability of enterprise applications without rebuilding from scratch. Many of these Microsoft tools are specifically designed to improve the usability – including communication, collaboration, mobility, report access, and overall presentation - of any application.
The Case for Optimizing Remedy using Microsoft Solutions

iLink has identified the advantages of a hybrid platform in which custom .Net components are added to improve access to an existing Remedy ARS installation. In our previous engagements, without duplicating or replicating the existing installations, iLink was able to improve the productivity of user groups such as field technicians using mobile devices and administrators preparing regulatory compliance reports by building .Net components that access an existing Remedy AR system through the Remedy API.

The custom .Net components compliment the strengths of existing Remedy platform bringing specific advantages that enable elegant enhancement of Remedy installations

1. Data updates from .Net-based solutions use the native Remedy api to allow existing Remedy workflows/business rules to function as intended

2. .Net UI provides a richer user interface by employing existing Windows controls not available in the Remedy client UI

3. .Net can fully utilize all available database technologies to provide faster response and/or simplify relationships between Remedy objects (stored procedures, triggers, materialized views, etc)

4. .Net solutions can also easily integrate existing Microsoft products or web technologies, if needed, to further enhance the usability of the .Net interface

The added advantage of .Net solutions is not only they are easy to build and maintain but it is also easy to find resources that can build and maintain the solutions

What are OBAs?

OBAs, or Office Business Applications, connect Line of Business (LOB) systems and Enterprise Applications with the people that use them through the familiar user interface of Microsoft Office. OBAs enable businesses to extend the Microsoft Office clients and servers into business processes running in LOB applications such as Enterprise Resource Planning (ERP), Customer Relationship Management (CRM), and even custom business applications. This enables organizations to create new value from existing IT investments by combining them in innovative ways.

For example, iLink built an OBA solution for the managers of a hospital network that allows them to view an interactive dashboard of key performance indicators that resides within their Outlook home folder and appears on their desktop when they launch Outlook each morning.
Case Study: Fortune 50 Telecom Client

A fortune 50 telecom client identified a number of problems with its existing Remedy solution. Furthermore, the client was planning to expand its Remedy application, but determined that adding more Remedy modules was cost prohibitive.

The challenges face by our Client included:

- Existing search, retrieve, and update functionality – even with respect to tickets created by a particular user – suffered from a slow-to-load and cumbersome-to-use UI, which made it difficult for most users to find and use information.
- Lack of mobile access necessitated manual re-entry of field notes, occupying more time and introducing unnecessary errors.
- Lack of an integrated reporting engine necessitated not only manual reentry of ticket data, taking time and introducing errors, but it made necessary a tedious and time consuming reconciliation process to find and correct errors before reports could be sent to Federal compliance officers.
- Interfacing with existing inventory management systems and site management systems was extremely difficult as Remedy-native web services lacked data types needed by the Client (and available in .Net).

iLink’s Optimization Solution

To address the Client’s problems, iLink developed a series of modules that we integrated into their existing environment, as indicated by portions (.Net UI, .Net Web Services, Reporting engine) in the diagram below:
For this Client, iLink built:

- A simple, speedy web-based tool for searching service tickets being managed by the Remedy system. This tool allows rapid access to ticket data direct from the data source without forcing users to launch a comparatively cumbersome client application licensed from Remedy.

- A mobile web browser portal that lets technicians work on tickets from the field using their handheld devices. Technicians can log in, see a list of all of their active tickets, click to retrieve ticket data, and update ticket data from their handhelds.

- A web page interface to the Remedy back end system that is considerably faster, easier to use, and more customizable than the standard Remedy web interface. Usability is improved in part by quickly pre-populating and updating forms using the latest AJAX technology for .Net. This component also enables users to send and receive links to individual tickets via email.

- Custom web services for the Remedy back end. Because iLink optimized web services for this particular customer, the web services provided by this component are more powerful and more efficient than pre-existing Remedy-native web services.

- An independent system for aggregating, analyzing, and reporting about tickets that match certain regulatory criteria. Although this reporting component also could have been created within Remedy, the customer chose to build it in .Net. It pulls a snapshot of ticketing information from the existing Remedy system, assists with summary and analysis, and exports reports that comply with current government regulations.

When optimizing an Enterprise Application, it is important to focus on both the new features and enhancements being created for the project as well as the core functionality that is not disrupted. In this Remedy Optimization solution, iLink did not:

- Recreate existing business rules (like validation of telephone numbers, etc.) already established within the existing Remedy system. Instead, user data obtained through .Net components is channeled into the established Remedy workflow.

- Duplicate the established user authentication schema. Although a new authentication mechanism could have been built in .Net, the user authentication module already built in Remedy is used to authenticate .Net users.
Benefits of iLink’s Remedy Optimization Solution

1. More flexibility in budgeting for and choosing new features
2. Lower cost to build and maintain new features
3. Enhanced performance and usability for individual users and user groups, including personal landing pages and mobile access
4. Improved productivity
5. Lower training costs and faster adoption of new features by users
6. Improved access to data
7. Faster response to time-sensitive incidents
8. Faster, lower-cost regulatory compliance

About iLink Systems:

iLink Systems is a custom software solutions provider and Microsoft Certified Gold Partner. Our solution capabilities include enterprise application development, optimization and integration; web application development; user experience architecture; and mobility application development and services. Our vertical industry experience includes: healthcare, government, technology, telecom, and nonprofit. iLink has worked with companies and organizations at all levels of business maturity, from startups to the Fortune 50. Our accomplishments also include numerous rapid application prototype development and complex solution migrations from one technology framework to another.

Headquartered in Bellevue, Washington, iLink has offices in Washington, D.C., Atlanta, GA, and Chennai, India. With over 120 employees and growing, iLink has been providing business solutions for over six years. Members of our team have numerous certifications in a variety of technology and solution frameworks, particularly on the Microsoft platform.

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