



White
Paper



Delivering Enterprise Information for Corporate Portals

How next-generation Enterprise Reporting solutions can be leveraged to provide rapid, seamless, personalized, and secure access to business data for all types of portal users.

Introduction

Over the last several years, many corporations have adopted Web-based portals to share information externally - with customers and partners - and internally, among sales, marketing, manufacturing, operations and support personnel. These portals, sometimes known as extra- or intranets, provide secure, customized views of enterprise information, access to select enterprise applications and databases, and collaboration facilities to support teamwork within and across companies.

Even as many of these portals evolve into highly personalized Web "dashboards" with access to diverse, modular Web Services, end-users' requirements remain relatively stable. Generally, end-users across an array of industries use both internal and external portals to access multiple enterprise applications and data sources, via personalized and localized interfaces. To be effective, these portals must deliver easy and fast portal navigation, a personalized experience, and high levels of security to protect sensitive corporate data.

To meet these diverse needs, many IT professionals are turning to Enterprise Reporting systems, such as those available from Actuate Corporation, to perform the technically challenging tasks of cross-enterprise data access, seamless information integration, and speedy, intuitive navigation of personalized data views. The Actuate family of products meets these needs with unparalleled levels of flexibility, scalability, and reliability, making Actuate products ideal for large-scale portals serving large numbers of users throughout the enterprise and beyond.

This paper will discuss the role of portals within today's corporate information infrastructures, outline the major requirements for large-scale, intra- and extranet portals, and demonstrate how Actuate's Enterprise Reporting products provide the essential ingredient to enable these portals to serve up fast, seamless access to enterprise information for all types of users.

Market Overview

"Even though portals are the most-desired user interface in IT, the concept of portals remains among the most misunderstood by customers and most abused by vendors. Portals provide selected audiences with access to and interaction with relevant and personalized information assets (information/content, applications/data and business processes), knowledge assets and human assets."

Gene Phifer, Gartner Group

Born in the consumer world to serve such sites as Yahoo, AOL, and Excite, the concept of a Web-based portal has evolved rapidly over the last several years. Originally, a portal was a "destination site" for consumers, a single site that served up an array of news, features, photos, live stock quotes and other syndicated content. The idea was to deliver everything the consumer might need on a single "sticky" site, to keep them on that site for advertising purposes. As the use of portals grew, portal providers added customizable data views and personalization features to enable users to select the content they wanted to view as well as the format in which to view it.

Today, corporate IT departments are turning to the portal format as an ideal way to serve customized views of vital enterprise information and services to both their own workforces and to external colleagues such as partners, distributors, suppliers, customers and prospective customers. So now, for example, employees at IBM check into their intranet portal every day for relevant business news, IBM press releases and news coverage, new product data, and new benefit and stock option information, as well as role-specific access to IBM's CRM, ERP, and supply chain management systems. IBM distributors have their own portal, which gives them up-to-date information on new products, promotions, and discounts, as well as the ability to tap into IBM's order entry and inventory systems securely to ensure adequate stock for their customers.

As this example shows, corporate portals are generally of two varieties: employee-facing, such as customized portals for sales forces, R&D teams, marketing campaigns, and more, or partner-facing, such as portals specifically customized for suppliers, distributors, strategic partners, and of course, customers. External portals are often integrated with a company's Web site and accessible from that site through registration and log-in procedures. Both types of sites strive to serve up customized or even personalized access to internal and external data, applications, and collaboration facilities to deliver on the original portal concept of a destination site with everything the user needs in one secure, easy-to-navigate site.

As a result of the portal's evolution into a central component in many corporations' information infrastructure, the use of portals has grown substantially, with numerous large, enterprise-wide deployments now underway, according to Gartner Group. Meanwhile, Forrester Research estimates that the median price corporations are spending to build portals has risen to \$1M to deliver portals that

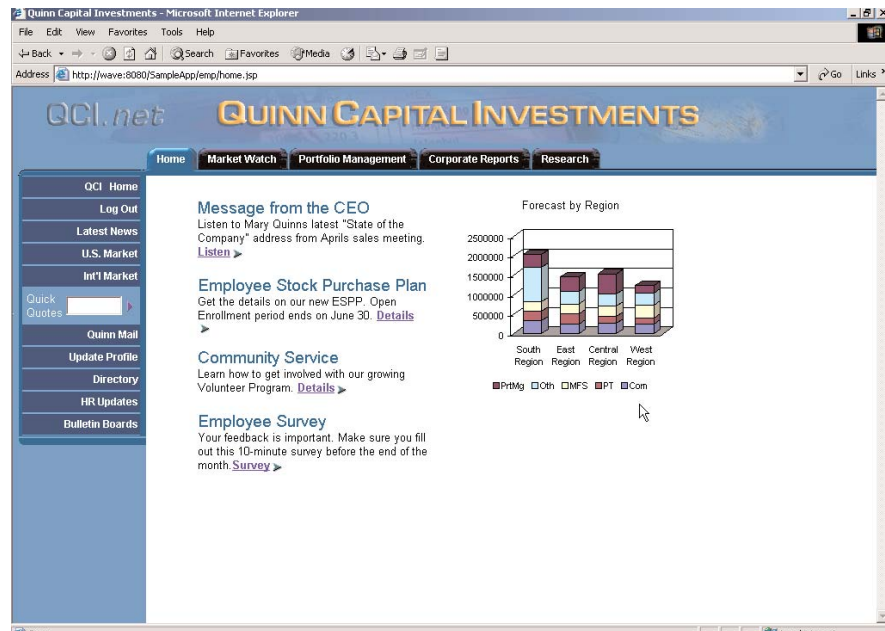
serve a median of 9,900 internal users alone today, a figure that is projected to grow to a median 13,000 over the next two years. The next step for portal projects is also becoming clear: Many of these sites will evolve into Web "dashboards" personalized for each corporate user to provide easy, push-button access to an array of modular Web Services for enterprise and cross-enterprise functions.

What portal managers need today

IT managers in charge of portal projects face a bewildering array of technology products from vendors promising portal capability. These range from application server products with portal and "portlet" features, to content management, content aggregation and personalization systems, to "pure play" portal products that often come with a dose of domain expertise to complement their portal capabilities. With the ability to access, format, and deliver customized, personalized data views from disparate internal and external data sources, and integrate those views transparently into any Web environment, Enterprise Reporting systems are becoming an important element in many IT organization's portal plans.

The technical and market leader in Enterprise Reporting Applications, Actuate provides a family of products for seamless enterprise data integration within intra- and extranet portals. Actuate enables both developers and users to create, format and deliver Web and Excel spreadsheet reports complete with formulas and formatting, which blend seamlessly into any Web infrastructure and look-and-feel. Actuate provides a powerful reporting component that can be integrated seamlessly into any portal environment. It features an open Enterprise Reporting Services API, a SOAP-based and WSDL-callable platform that provides a language-independent means to integrate Actuate services with other applications.

In addition to Web Services support for portal integration, Actuate also offers a set of Portal Services, designed specifically to enable both the back-end and interface integration necessary to meet user requirements for portals while reducing the burden on IT managers in charge of portal projects.



Actuate's Portal Services, including features like Reportlets, make its Information Delivery platform ideal for delivering access to corporate data via portals.

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Specifically, Actuate's Portal Services offer:

Fast, seamless data access

Gartner Group has recognized that corporate portals serve two primary functions: communication and collaboration. In order to communicate up-to-the-minute enterprise information, corporate portals must have fast, seamless data access to diverse data sources both inside and outside of corporate firewalls - for example, a portal for manufacturing production planners must display timely information on suppliers' inventory status. Actuate supports access to any data source to create reports and spreadsheets, enabling Enterprise Reporting from anywhere, to anyone. Actuate provides native connectivity to popular database management systems such as Oracle, Microsoft SQL Server, Sybase and Progress, in addition to JDBC/ODBC connectivity. The server can also support access to flat files, any API-enabled data source, Web Services, and business logic implemented as Enterprise JavaBeans, CORBA, COM or C++ objects.

Intuitive, easy content navigation

Because portals serve such a wide range of end-users across a broad spectrum of sophistication and training levels, it is vitally important that the information

presented on a portal be easily usable and navigable. Users should be able to quickly locate the information they need, drill into it for more detail, hyperlink to related information, and search for relevant accompanying data. Actuate excels in delivering usable information. Its Active Portal feature enables developers to use industry-standard Web editors to integrate and customize Actuate interfaces to align with each portal's look and feel, so that Actuate-retrieved information looks to end-users like simply another set of Web pages within their portal.

And in addition to standard DHTML, HTML, PDF, Excel, and XML formats, Actuate Server can return information as a Reportlet™, or partial DHTML page, which can be easily integrated into existing portal pages. Actuate also gives users automatic NavBars and lets users drill down into detailed information, across data fields for context and scope, and up for the "big picture," with no restrictions on the number of levels. Users can link to Actuate content or page from any Web page or email message through automatic hyperlinks, and can bookmark a report or partial report quickly and easily for future reference. A unique context-sensitive search enables users to search across single or multiple Web pages simultaneously.

Fast portal navigation

For many portal managers, speedy data access and navigation is just as important as ease of use. In the Forrester survey, for example, 53 percent cited "access to information" as the most important measurable benefit of their corporate portal. This requirement is especially critical to managers of external portals, since customers, partners, and distributors who cannot get quick access to the information they seek may well click over to the competition. Actuate meets this need with cached and on-demand information generation; Its high-performance Express Content feature delivers one-time-only, on-demand reports optimized for quick delivery and minimal storage. Meanwhile, Actuate also supports cached reports for users who need detailed information from a particular point in time. Actuate users can navigate through large volumes of content easily and flexibly using the Demand Paging facility, which ensures that only the specific page of content requested by the user is sent to the browser from the Actuate Server. And Actuate users experience very short waits to view multi-page reports, because Actuate Server can send the first page or a single page to the requesting users as soon as it is generated.

Personalized content

As portals grow in sophistication and ease of use, portal managers are increasingly customizing portal content to meet the needs of each user more precisely. Such personalization goes beyond the selection of fonts, colors, and placement traditionally offered by consumer portals, to encompass data-level personalization. This enables portals to deliver specific sets of information to specific users based on their roles, access levels and responsibilities. Actuate enables portal managers to create localized, personalized portal content, using such features

as the Page Level Security Option, which gives end-users personalized views of a single report. Meanwhile, advanced internationalization (i18n) features, including full Unicode support, enable portal managers to accommodate multiple languages, cultural contexts, data, and time zones.

Secure data access

Corporate portals have one natural vulnerability: Security. Although portal managers are pressured to provide rapid, open, seamless data access for thousands of portal users simultaneously, they must also ensure that sensitive corporate data is protected at all times. Intranet portals, for example, must provide push-button access to such HR data as benefits and pension plan options, without giving employees the option to view sensitive salary, bonus, or stock option grant information. An extranet portal for distributors should enable users to retrieve product information quickly and easily, without inadvertently providing access to pricing data. And even when super-sensitive data is properly protected, portals must incorporate proper access control to ensure competitors and hackers do not gain access to corporate data stores via the portal.

Actuate addresses these needs with a highly customizable Enterprise Reporting Application Platform that can operate securely within and across corporate firewalls and work seamlessly within existing security frameworks. Actuate7 features role-based security to allow portal managers to control user access to Actuate-generated information based on roles and access controls. Its Open Security Directory Integration feature enables portal administrators to leverage existing user administration services, such as LDAP or Active Directory services, to control user access. This means that administrators can leverage existing portal directories or external applications to generate and manage user authorization levels, authentication, roles, and access privileges, then apply that information within Actuate quickly and easily. Single sign-on can be achieved through seamless integration with existing Web, operating system, or application security controls.

Summary

Today's internal and external corporate portals are a vital source of information for hundreds of thousands of corporate employees, customers, and partners. Portal managers who seek to give these users the fastest, most seamless access to enterprise information should consider Actuate, a highly flexible, scalable, and powerful Enterprise Reporting Application Platform provides completely transparent information retrieval, along with the personalization, navigability, and security features portal managers have come to expect.