

Empower business users and unlock business value with IBM Mashup Center.





But employees sometimes find it difficult to make informed decisions and seize opportunities. They spend a lot of time gathering information from business applications, the Web and their own personal knowledge stores. And they're often overloaded with information, unable to find useful insights among the vast amounts of irrelevant data. Employees are constantly hamstrung—torn between spur-of-the-moment business demands and the time it takes to browse the wide range of resources they have at their disposal.

IT departments can help, but they're caught in a bottleneck. Inundated with requests for new applications and updates to existing functionality, developers must focus on the projects that serve the greatest number of users for the highest and most strategic returns. The IT department is hard-pressed to justify the cost of development projects that have narrower goals and that are intended for smaller user groups—especially as budgets shrink in the challenging economic climate. As a result, many useful applications may fall by the wayside, and users must make do with what they have. Sound familiar?

A NEW APPROACH

Fortunately, there is a way to give users the specific application functionality they need without overloading the IT team. It's called the IBM Mashup Center solution, and it's designed to bring Web 2.0 flexibility and performance to businesses. IBM Mashup Center can empower business users to create their own applications by transforming and combining the resources they already have—from enterprise systems and Web sites to desktop applications and personal spreadsheets.

Once IT has unlocked the data sources, users can quickly reuse and remix them so they can make better decisions, respond to emerging requirements and find new ways to drive revenue.

By allowing users to create tactical applications to address their own specific business requirements, IBM Mashup Center alleviates a portion of IT's burden and enables developers to focus on more strategic enterprise applications. This shift can dramatically reduce cycle times for tactical, ad hoc applications—putting new functionality into the hands of users in a matter of days rather than months. It can also help significantly reduce many of the costs associated with application development.





WHAT IS A MASHUP?

A MASHUP IS A LIGHTWEIGHT WEB APPLICATION CREATED BY COMBINING INFORMATION OR CAPABILITIES FROM MULTIPLE EXISTING SOURCES TO DELIVER NEW FUNCTIONS AND INSIGHTS. IN A BUSINESS ENVIRONMENT, A MASHUP TYPICALLY COMBINES ENTERPRISE AND WEB-BASED DATA TO SATISFY A SPECIFIC NEED. THE MASHUP ITSELF BECOMES A NEW DATA SOURCE OR APPLICATION THAT PRESENTS INFORMATION IN A DYNAMIC USER INTERFACE.



IBM Mashup Center

Legacy applications

Discover and share Tools and platforms Portlets IBM Lotus® Domino® IBM WebSphere® Application Server IBM Data Studio Enterprise information Javan® Database Connectivity (JDBC) IBM WebSphere MQ WSDL IBM Information Server Web services IBM Information Server IBM Information Server Web services IBM Information Server IBM Information Server Web services IBM IMS® IBM IMS® IBM IMS® IBM Information Server

GAIN FRESH INSIGHT BY COMBINING INFORMATION IN NEW WAYS

Applications

Web content

Google Gadgets

Web sites

Every employee provides a virtually endless source of insight—especially when it comes to the activities they perform every day. They just need the tools to organize, synthesize and transform the information they already have.

That's where the IBM Mashup Center solution can help. It allows business users to access and combine information from both internal and external data sources so they can assemble it in fresh, practical ways that meet their short-term needs. Information and application functionality can come from practically any source, including enterprise systems, departmental applications, desktop software and the Web. It simply requires some back-end adaptations to unlock existing IT resources for use as mashable assets. Once IT has laid the groundwork by building a catalog of widgets and feeds, it takes minutes for users to start assembling, transforming and filtering multiple sets of information.

To understand how enterprise mashups can bring insight to your organization, imagine a salesperson looking for revenue opportunities in the volatile financial services segment. She creates a mashup that combines her customer account information with feeds from the product database, regional news

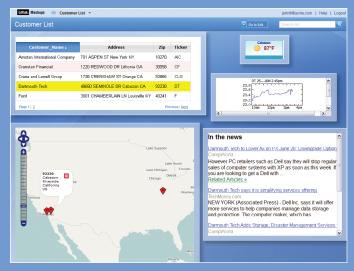


Figure 1. Multiple sources of information provide an expanded view of the customer

sources and stock tickers. By linking all this data, she can watch for signs that a customer may be ready to buy—a strong quarterly report or an office expansion combined with past buying behaviors, for instance. The mashup becomes a constant source of insight, helping her focus her sales efforts and drive revenue for her business. She can also share that insight with her colleagues by publishing her mashup in a central catalog.

IMPROVE AGILITY WITH QUICK DEPLOYMENT OF "GOOD-ENOUGH" APPLICATIONS

Business conditions can turn on a dime. Your organization has to be ready to seize opportunities and adapt to unexpected obstacles.

The IBM Mashup Center solution can help you act quickly and cost-effectively when an opportunity arises. Business users can create new mashups easily, pulling widgets and feeds from both the Internet and internal sources. In fact, IBM Mashup Center includes several packaged widgets that are ready to use right out of the box. Among them are widgets that allow users to generate charts and tables, display images, embed external Web content, define look and feel, and edit content in rich text. To supplement those widgets, IT developers can easily develop custom widgets based on enterprise applications and other internal resources. All of the widgets can be wired together—in realtime, on the screen—by the business user. And the mashups can be modified easily to accommodate new requirements.

By giving business users and IT the ability to create "good-enough" applications, IBM Mashup Center helps shorten the development cycle—to hours or days rather than weeks or

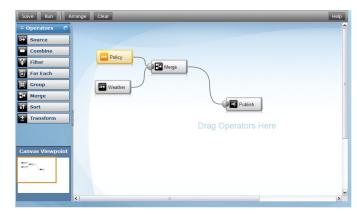


Figure 2. IBM Mashup Center provides an intuitive interface for visualizing and managing the connections between widgets.

months—and significantly reduce development costs. Consider how this agility might help an executive exploring an acquisition opportunity. Because a key competitor is also likely to issue a bid, she needs to understand her company's financial position in relation to the target business, the competition and regulatory restrictions. With enterprise mashups, she can pull it all together in a matter of hours or days by mixing and matching existing widgets and feeds—before the opportunity disappears.





WHAT'S A WIDGET?

FLAKE, A WIDGET IS A PIECE OF APPLICATION FUNCTIONALITY OR DYNAMIC CONTENT THAT CAN BE INCORPORATED EASILY INTO A USER INTERFACE. MASHABLE WIDGETS CAN BE WIRED TOGETHER TO CREATE NEW FUNCTIONALITY.

ENCOURAGE INNOVATION THROUGH SHARING AND REUSE

Good ideas can emerge spontaneously from everywhere in your organization. The trick to innovation is being able to capture those ideas, build on them and share them.

IBM Mashup Center is designed to help you establish an environment that encourages innovation. It includes a catalog—with Web 2.0-style community features—where users can not only share, discover and reuse mashups but also rate, tag and comment on them. These features help highlight useful assets so users don't have to look too far to find what they need. But assets and feeds rarely exist in exactly the form that users need. That's why IBM Mashup Center allows IT to mix and transform information from disparate sources—providing business users with the focused view they need to accelerate innovation. Developers can filter, merge, combine, group, sort, annotate and augment information to adapt feeds to specific business requirements. This ability to transform information plays a direct role in reducing costs and shortening cycle times.

A product engineer, for example, can search the catalog for a highly rated materials planning mashup, combine it with a frequently used mashup for tracking design specifications and add a feed from the customer complaint database. He can also incorporate information from outside the enterprise, such



WHAT'S A FEED?

A FEED IS A LIGHTWEIGHT MECHANISM THAT TRANSMITS DATA FROM ITS SOURCE TO THE CLIENT APPLICATION, PROVIDING END USERS WITH CONTINUALLY UPDATED INFORMATION IN A RESTFUL STYLE. WITH IBM MASHUP CENTER, FEEDS CAN COME FROM A WIDE RANGE OF SOURCES, INCLUDING CORE ENTERPRISE SYSTEMS, EXTERNAL WEB SITES, PERSONAL ASSETS SUCH AS SPREADSHEETS, LOCAL DATABASES AND LINE-OF-BUSINESS SYSTEMS.



as from suppliers and other business partners. Though all these sources use different standards and data formats, IBM Mashup Center allows IT to unlock the information and convert it into compatible feeds without changing the underlying information systems. Once feeds are created, the engineer can work with IT to normalize and extract the information based on specific parameters such as part numbers and customer accounts. This allows him to consider granular details in the context of the big picture. By bringing disparate elements together in a focused way, this innovative approach can help the engineer improve the electronic devices he designs, strengthening the company's reputation for quality and driving sales.



ALIGN IT WITH THE BUSINESS

With enterprise mashups, business users and IT can work together to extend the value of existing investments, reduce development costs and respond more quickly to business demands. And IT administrators don't have to give up control over application security and governance.

That's because IBM Mashup Center is designed to simplify access to information and assets in the IT environment. It supports extensive interoperability with existing technologies, including security capabilities and user directories. Using access control lists, IT administrators can define access rights for individual users and groups to maintain control over who sees what. Plus, they can monitor and report on application usage, tracking everything from user access to widget ratings.

IBM Mashup Center leverages Web 2.0 technologies like Representational State Transfer (REST) to make existing IT assets available as services that can be reused and recombined. In a sense, these flexible enterprise mashups give users a simpler way to tap into the service-oriented architecture (SOA) to solve specific problems—which can help IT departments demonstrate to users just how valuable SOA can be and deliver the promise of SOA reusability.

Though enterprise mashups off-load much of the application development burden from the IT department, some work remains. To create custom widgets that unlock existing data sources for users, developers must apply their coding skills. Connectivity with external sources is platform independent, allowing developers to incorporate feeds and create widgets using sources that are based on practically any technology. Plus, the development environment provides several out-of-the-box connectors for common data sources and intuitive wizards for creating new widgets. To draw from sources that cannot be accessed out of the box, developers can take advantage of extensible plug-ins to simplify the integration work.

WHY IBM?

IBM Mashup Center merges the features of IBM Lotus® Mashups and IBM InfoSphere™ MashupHub offerings, providing an end-to-end solution that supports all stages of the mashup workflow—creation, discovery, transformation, assembly and use. Combining Web 2.0 ease, intuitiveness and flexibility in a business-ready package, IBM Mashup Center can help you drive productivity and capitalize on business opportunities while maintaining control over your IT assets.

Exceptionally positioned to help companies adopt enterprise mashups, IBM Mashup Center combines front-end presentation, data manipulation capabilities and back-end communication with information sources from across your enterprise and beyond. The solution complements the enterprise applications you already have and builds on your SOA environment, giving users the tools to create applications for ad hoc business requirements and alleviating some of the IT burden.



WHAT'S REST?

REPRESENTATIONAL STATE TRANSFER, OR REST, IS A COL-LECTION OF NETWORK ARCHITECTURE PRINCIPLES THAT SIMPLIFY HOW SERVICES ARE DEFINED AND CALLED. THE TWO MOST COMMON RESTFUL FORMATS ARE RSS AND ATOM. IBM MASHUP CENTER WRAPS WIDGETS AND FEEDS AS RESTFUL SERVICES TO SUPPORT MASHABILITY AMONG THEM.





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To learn more about IBM Mashup Center, visit:

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Lotus Software IBM Software Group One Rogers Street Cambridge, MA 02142 U.S.A.

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