

# SAP for Business Users

Bringing SAP Applications to Microsoft SharePoint Users with Duet Enterprise

by David Brutman, SAP



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*“How do we help business users be more productive and effective, and even make them smile?”*

IT organizations have long been challenged to ensure that their business users are engaged and satisfied. Yet, managing the complexity, cost, and risk associated with running mission-critical systems does not necessarily go hand-in-hand with meeting end users' and business units' expectations.

End users are focused on business performance. They need to adjust quickly to market dynamics. This immediacy requires easy-to-use, scalable, and flexible enterprise systems that users can access from their preferred work environments and devices.

IT departments constantly need to balance competing interests and manage the gap between business and IT. On one hand, they need to maintain secure, highly available systems with strict cost awareness. On the other hand, they must deliver an excellent experience and high value to business stakeholders. The key to this balancing act is to deliver business solutions that are:

- **Relevant:** Personalized for a user's role, position, and task
- **Convenient:** Able to run on a user's desired device or environment
- **Timely:** Able to work in real time, representing the current state of the business

SAP has been at the forefront of helping IT departments bridge this gap to better serve the business. Central to this effort is SAP's on-device initiative, which enables customers to integrate SAP software with many different devices, environments, and tools. SAP's on-device strategy aims to combine the experiences of the latest

devices, social networks, and office applications with the powerful business processes and insight provided by SAP.

To carry out its on-device strategy, SAP is partnering with key software vendors. A significant partnership in this space is with Microsoft; together, the two companies are offering their joint customers a framework to connect SAP applications with Microsoft SharePoint and Microsoft Office products through Duet Enterprise software.

## Delivering SAP Solutions to Microsoft SharePoint Users with Duet Enterprise

Duet Enterprise, an interoperability solution recently released by SAP and Microsoft, supports access to SAP applications through Microsoft SharePoint and Microsoft Office products. With Duet Enterprise, people benefit from the business processes, data, and context of SAP applications, combined with the productivity, collaboration, and content management capabilities of Microsoft SharePoint and Microsoft Office. The benefits are clear — among them,

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a significant increase in the productivity of individuals and teams (see sidebar).

For example, imagine that a customer submits a request for a price quote. An account team is able to create a Duet Enterprise workspace in Microsoft SharePoint to respond to this request (see **Figure 1**). Through the workspace, the team can access the quotation request document to better understand the customer's expectations, run a win-loss report to address competition, and approve the quote using a workflow — all delivered to Microsoft SharePoint software from SAP applications.

At the same time, the team can collaborate to create a plan, use instant messaging, share documents, and co-author the quotation response document simultaneously using Microsoft SharePoint features. Let's look at how Duet Enterprise makes this possible.

### Duet Enterprise: An Overview

Duet Enterprise delivers a built-in **foundation for interoperability** between SAP applications and Microsoft SharePoint. The software offers **development tools and business content** to easily create composite solutions, and it includes **ready-to-use capabilities**. These three areas support the collaboration enabled by Microsoft SharePoint, as well as the business process functionality of SAP applications (see **Figure 2** on the next page).

### An Interoperability Foundation

Duet Enterprise offers partners and customers a foundation to compose, develop, and use solutions that leverage Microsoft SharePoint and SAP applications. The foundation supports key technology areas that enable SAP applications to interoperate with Microsoft SharePoint. For example, it covers end-to-end security, securing the messages between the SAP and Microsoft technology stacks, mapping user names to enable single sign-on, and applying the SAP authorization structure to the Microsoft SharePoint user interface.

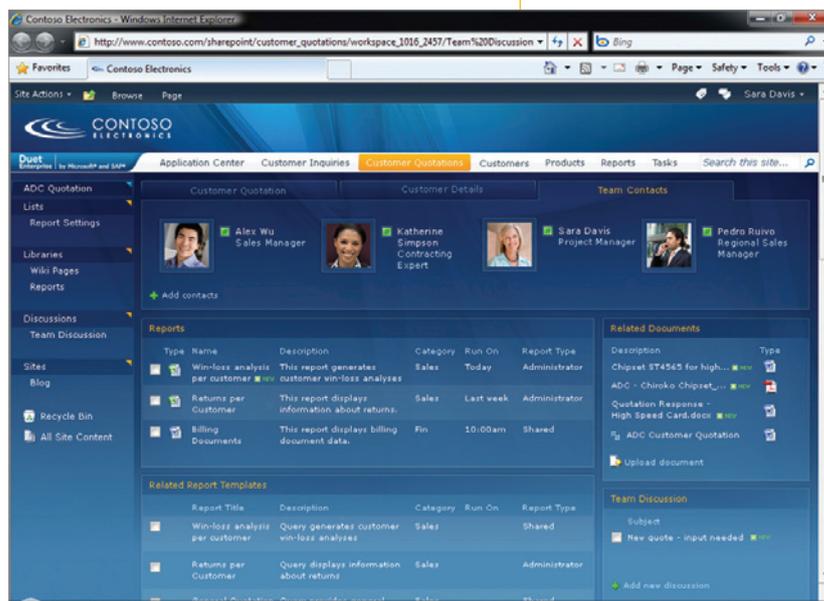
The foundation also covers the areas of monitoring and supportability, application life-cycle management, administration, and offline support. An early Duet Enterprise customer clearly articulated the value of the foundation: "It enables us to move up the stack and focus

on solution development rather than on the 'plumbing' that used to consume so many of our resources in the past."

Duet Enterprise is designed to leverage and build on the core platforms of SAP and Microsoft, enabling an organization to install the product in its existing landscape without disruption

## 3 Key Benefits of Duet Enterprise

- 1. Boost the productivity of individuals and teams.** Duet Enterprise can deliver business information to teams of users, enabling them to jointly address issues or collaborate around business tasks.
- 2. Gain more value from existing investments in SAP software, as well as Microsoft SharePoint.** Duet Enterprise brings SAP applications to more users in various lines of business, including users who don't usually work with SAP software. And, by making more business information available to Microsoft SharePoint users, Duet Enterprise helps IT teams increase the business value of their investment in this product. Because Duet Enterprise builds on the core SAP NetWeaver and Microsoft SharePoint platforms and leverages existing skill sets, it minimizes the impact on system landscape and project requirements.
- 3. Quickly compose solutions that address changing business needs.** IT can address business needs more swiftly and effectively, and business users can easily work with Microsoft SharePoint without assistance from IT. Consider a sales team that is using Microsoft SharePoint to work on a new promotion. Rather than calling IT, the team can use Microsoft SharePoint Designer to access new SAP data sets and configure a user interface suited to how the team wants to work.



**FIGURE 1** ▲ A user can access SAP applications through his or her Duet Enterprise workspace in Microsoft SharePoint

or the need to upgrade any component in that landscape. For example, it enables connection to any existing SAP Business Suite version. What's more, the IT team's knowledge of both SAP NetWeaver ABAP and Microsoft SharePoint can be fully leveraged, decreasing the need for training.

Building on the Microsoft SharePoint 2010 platform, Duet Enterprise connects to SAP applications through a Microsoft SharePoint component called Business Connectivity Services. Duet Enterprise also offers an add-on module to SAP NetWeaver called the Service Consumption Layer, which enables simplified access to SAP software from any device or environment using standard protocols. This layer provides robust data aggregation and a

simplified view of SAP data objects, as well as the connectivity to Microsoft SharePoint. It is the first version of Project "Gateway" that will extend the ability to consume SAP software to other environments, platforms, and devices.

### Development Tools and Business Content

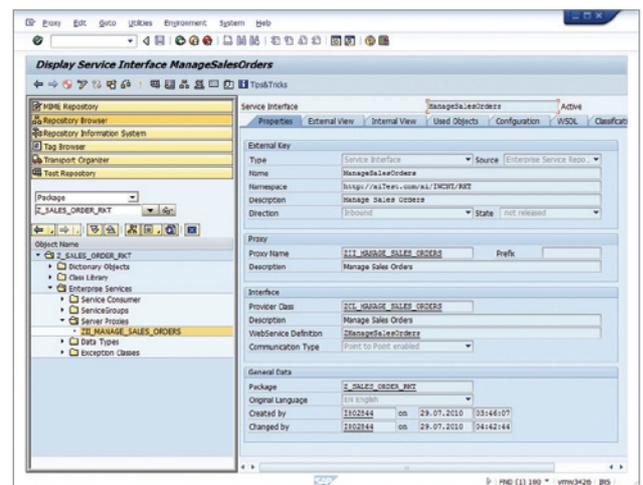
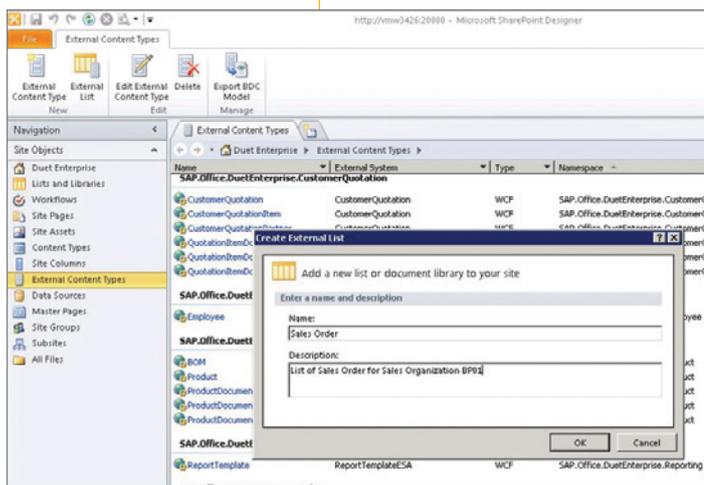
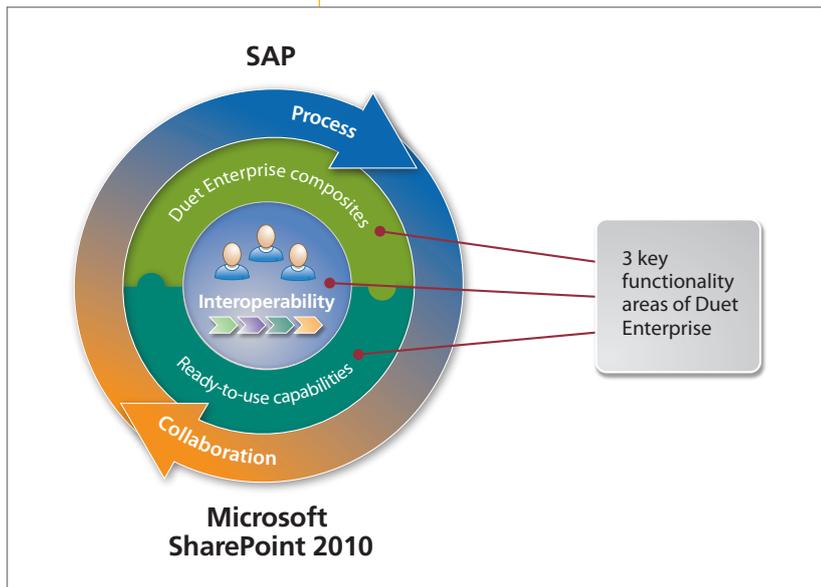
With Duet Enterprise development tools, companies can create a range of solutions — such as simple solutions that surface data sets from SAP applications in Microsoft SharePoint web parts, or intermediate-level ones that require further data or user interface customization. Advanced solutions may require custom aggregation and logic; an example is a solution for suppliers that aggregates data from multiple SAP systems and uses a unique presentation of the data.

Business users can create and configure simple scenarios — no coding required — using tools such as the Microsoft SharePoint Designer; advanced solutions would require a professional ABAP developer using the ABAP Workbench or a .NET developer using Visual Studio (see **Figure 3**). Standard SAP and Microsoft tools are used to minimize the learning requirements and IT resources needed. The general steps involved in composing a solution are three-fold:

1. Expose the SAP functionality as a web service to Microsoft SharePoint.
2. Create a Microsoft SharePoint External Content type.<sup>1</sup>

<sup>1</sup> Note that "Content type" is a term specific to Microsoft SharePoint. It is equivalent to an SAP data object.

**FIGURE 2** ▼ Duet Enterprise's three functionality areas support Microsoft SharePoint collaboration and SAP business processes



**FIGURE 3** ▲ Users can work with the Microsoft SharePoint Designer (left), and developers can use the ABAP Workbench (right) to configure SAP web services

3. Generate or create the user interface in Microsoft SharePoint or Microsoft Office.

As an optional step, users can also develop .NET code to customize the user interface.

### Ready-to-Use Capabilities

To provide rapid time-to-value for common usage types and accelerate the speed of solution creation, Duet Enterprise offers a set of quick-to-implement, ready-to-use capabilities that can be used as building blocks within a new solution.

For example, customers are frequently looking to use a Microsoft SharePoint or Microsoft Office interface to access and approve workflows from SAP applications. Consider that a user wants to approve a purchase order, travel expense, or marketing budget request. A ready-to-use capability within Duet Enterprise connects to SAP workflows and surfaces those workflows in Microsoft SharePoint or Microsoft Office; users can then approve the requests from Microsoft SharePoint or their Outlook inbox.

Additional ready-to-use capabilities allow users to work with Duet Enterprise sites to expose data objects from SAP applications as Microsoft SharePoint sites and to create collaborative Microsoft SharePoint workspaces for SAP information on an ad hoc basis. The software also allows users to augment Microsoft SharePoint user profiles with information from SAP ERP Human Capital Management (SAP ERP HCM) and to run and personalize reports generated by SAP NetWeaver Business Warehouse (SAP NetWeaver BW) and SAP ERP.

### Bridging the Gap

Duet Enterprise connects SAP applications with Microsoft SharePoint and Microsoft Office. Offering extensive flexibility and rapid development, the product enables IT organizations to deliver timely solutions that address the changing business needs of a growing number of employees and, in turn, increase the return on IT investments.

Imagine how your end users will react when they have seamless access to the data, documents, and people relevant to their business tasks, all available through the Microsoft tools and environments they're already using. This will surely enable them to focus on value-added tasks; no

## Partner Roadmap: Delivering More Targeted Solutions

Partners of SAP and Microsoft plan to use Duet Enterprise to deliver targeted solutions that address the needs of specific functional areas and industries. IT departments are expected to develop solutions that address their company-specific business requirements. And using the simple tools available with Duet Enterprise, even business units can configure non-complex solutions leveraging the Duet Enterprise infrastructure.

On February 1, 2011, SAP and Microsoft will introduce SAP-MICROSOFT Unite Partner Connection, a new global program that will improve how solutions are delivered to their joint customers and will create new opportunities for their partners. Partners can now collaborate with SAP and Microsoft to expand their portfolios more efficiently and reach more customers with less risk and more reward. As a result, customers will benefit from solutions that are more closely aligned with their needs to address their business and IT challenges, gaining greater ROI and lowering TCO for their Microsoft and SAP investments.

To learn more about the program, visit <http://ecohub.sap.com/unite>.

longer will they have to tediously search for the right piece of information and make sure it's shared with the right people. Duet Enterprise makes this level of end-user access possible. Wouldn't that make your users smile?

Please visit [www.duetenterprisesummit.com](http://www.duetenterprisesummit.com) and [www.duet.com](http://www.duet.com) for more information. ■

### Additional Resources...

- The SAPinsider IT 2011 conference, located in Las Vegas, Nevada, March 15-18, 2011 ([www.it-2011.com](http://www.it-2011.com)), featuring a case study session on one company's decision to implement a hybrid corporate portal with SAP NetWeaver Portal and Microsoft SharePoint
- "Drive SAP User Productivity While Containing Costs: 2 Quick, Easy Ways to Get Started" by Victoria Menshchikova (*SAPinsider*, April-June 2009, [sapinsider.wispubs.com](http://sapinsider.wispubs.com))
- *Practical Workflow for SAP (2nd edition)* by Ginger Gatling, et al. (SAP PRESS, [www.sap-press.com](http://www.sap-press.com))

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