Microsoft and SAP White Paper

SIMPLIFYING ACCESS OF ENTERPRISE SYSTEMS FROM THE DESKTOP

Microsoft®

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EXECUTIVE SUMMARY

Information workers primarily rely on familiar desktop productivity applications to help them perform their daily job functions, analyze data, and collaborate with others. However, these workers are not benefiting from enterprise systems that provide important information, deliver automated process efficiencies, and enable enhanced collaboration. If information workers do require information stored in enterprise systems, they tend to rely on power users to gain access to it. Because the power of business applications is not reaching every employee, decision making is constrained, productivity is diminished, and corporations are increasingly at risk of being out of compliance with standards and policies. Today's organizations need a solution that eliminates the information worker's reliance on business application experts and seamlessly connects the process and productivity application worlds.

INFORMATION WORKER CHALLENGES

Organizations have made significant investments in enterprise applications that simplify and enhance business processes. Some of the primary reasons for deploying enterprise applications are to dramatically improve productivity and to ensure effective decision making and compliance. However, when not all employees have access to these applications and the automated processes enabled by them, the intended benefits are not realized, and best practices encompassed in enterprise application investments are not leveraged to the fullest. Those organizations that cannot provide their employees with instant access to critical enterprise system information are impacted in the following ways:

- Inefficient workflow
- Hindered employee productivity
- Poor use of knowledge

Inefficient Workflow

When workers must engage in a business process, all too often they do not know where to begin, or they have limited access to information or are unfamiliar with process guidelines. The desktop applications that information workers rely on for everyday tasks do not allow employees to participate in automated processes and lack the insight delivered by business systems. For example, if a manager wants to offer an employee a spot bonus and is uncertain as to who needs to be involved in the approval cycle or what the process is, or needs other bonus-related data, typically the manager sends an e-mail to someone in the HR department asking for the information. HR personnel might reply via e-mail, but they will also need to execute the process in the HR system on behalf of the manager. While the bonus decision is dictated by the manager, that person is dependent on the HR power user both for information and to move the process forward in the system. The result is an inefficient process involving multiple e-mails.

Similarly, communications relating to promotions, new positions, and reassignments often occur separately in Microsoft Outlook and via workflow in the HR system. Moreover, actions within HR systems might be triggered by HR personnel, even though the relevant department management – for example, marketing – is responsible for the decisions. Using these multiple, disconnected chains of communication to implement organizational changes results in unnecessary inefficiencies.

Because information workers often rely on e-mail to perform their work, processes can prove frustrating and it can take longer than necessary to finish a task. Consider another example of a manager who wants to promote an employee as part of a quarterly review. The manager must be familiar with current organizational policies regarding performance appraisals, promotions, and salary adjustments, and needs information such as the employee's salary, departmental budget and promotion guidelines, and any existing salary caps. However, gaining access to the needed information can be a very time-consuming process that requires working in multiple unfamiliar applications. This increases the manager's likelihood of reliance on a middle person, such as someone in HR, for policy guidance, all the needed information, and execution of the workflow.

Because employees typically require more training to operate business applications than desktop productivity tools, power users or specialists familiar with these applications are often relied upon to extract knowledge from enterprise systems. In effect, the specialists become gatekeepers, and when information workers rely on them to access business intelligence, workflow is hampered and productivity bottlenecks occur.

Hindered Employee Productivity

To access information, comply with automated processes, and complete tasks, information workers must use many different applications, ranging from desktop productivity tools to business systems. On the desktop, employees often manage work and information with spreadsheets, e-mail, and presentation tools, while employees use enterprise applications to record time, manage customer data, and process employee files, to name a few activities. This means that information workers require training on multiple applications to complete their work.

Within most organizations, employees interact differently with data, depending on the systems being used. On one hand, corporate processes are captured and enabled through policies and workflows within enterprise applications. On the other hand, desktop work is handled in a much looser fashion, with ad hoc workflows based on sending e-mails and creating personal task lists. Often, users reinvent and create more complex processes to adapt to the disconnect between the corporate process and their individual processes (that is, "My Process"). This leads to inefficiencies and increases the likelihood of noncompliance with corporate standards because of the organization's inability to govern processes.

In addition, these disconnected processes result in different formats of data: structured data residing in business systems and databases, and unstructured data residing in e-mails and desktop documents. Furthermore, the distinct differences between desktop productivity tools and business applications mean information does not always make its way to enterprise systems in a timely manner; or, the information being used might be outdated when the user is unaware of the updates in the enterprise system. For example, certain data, such as customer or sales data, needs to be entered quickly and efficiently; however, many employees see enterprise system data entry as an unproductive, low-priority task. Because they already use applications such as Microsoft Outlook, Word, or Excel to organize data on their desktops and to communicate with others in the organization about this information, many employees see no need to enter information a second time into business applications. The disconnect between desktop and business applications results in a lack of data synchronization and accessibility.

Accessing analytics, reports, and predictive modeling information embedded in enterprise systems is critical for information workers. If they lack quick and easy access to existing information, employees are not likely to use this information in the decision-making process. When employees need to spend time toggling between business applications to search for information, productivity is negatively impacted.

Poor Use of Knowledge

The old adage "out of sight, out of mind" applies to business applications. The farther enterprise systems are from an employee's daily application use, the less likely it is that they will be employed. Using common desktop applications such as e-mail, calendaring, word processing, and spreadsheets, information workers rely on their own processes and maintain their own data records.

For example, consider a customer relationship management (CRM) system that is being used to identify customers who might lead to ideal up-sell opportunities. Because updating information in the CRM system might be perceived as an additional task with no immediate benefits, employees are probably not performing updates in a timely manner. Old or incorrect data limits the organization's ability to identify the best sales prospects.

Even when information is being updated regularly, employees do not leverage some of the more powerful intelligence contained in enterprise systems when making decisions, for some of the following reasons:

- Workers must be connected to the system and cannot access data offline, such as while working on an airplane.
- Transactions may occur in multiple systems, requiring that users know where to go to retrieve knowledge.
- Search and access costs are further increased because employees must toggle between different applications.

THE NEED TO CONNECT INFORMATION WORKERS WITH ENTERPRISE PROCESSES

To extend the power of business applications to every employee, organizations need a solution that provides continuity of information and processes between enterprise and desktop productivity applications.

The ideal solution must do the following:

- Hide the complexity of business systems for all users
- Guide employees through a complete process
- Reduce the need to work with multiple applications
- Enable workers to focus on core tasks

Hiding Complexity

Employees accustomed to working within the desktop environment on a daily basis can be reluctant to work with enterprise applications since the experience and functionality are so unfamiliar to them. When information workers require data accessible only via these enterprise applications, they often ask an expert user to gather and pass on the information rather than learn how to access the information themselves. When these experts are unable or unwilling to provide the requested information in a timely manner, information workers will often proceed without the data. This leads to an unfair balance in unnecessary work for certain employees, the creation of additional processes to avoid system usage, and decisions based on outdated information.

Organizations need a solution that simplifies the way information workers access and use enterprise applications. The ideal solution would natively embed processes within familiar desktop applications to simplify data gathering and analysis by information workers. Such a solution would remove redundant steps that become necessary when critical data and processes are segregated within the corporate environment.

Guiding Employees Through Processes

Instead of forcing employees to learn about and adapt to fixed solutions, business applications must take into account how users are working and adapt appropriately. The ideal solution unites the disparate worlds of enterprise systems and the desktop by guiding information workers through corporate processes within the familiar desktop environment – or by automating those processes altogether. For example, if an employee submits a vacation request via e-mail, the time records would be updated in the HR application, which would, in turn, send a request for approval to the manager's e-mail client. The manager, in turn, should receive all the contextual information needed to help support the approval process, such as vacation allocation, vacation requests across the entire team, and any project dependencies, to name a few. The system can also guide the manager through the process for any additional approvals required.

Reducing the Number of Applications Used

As employees toggle between enterprise and desktop productivity tools and applications to complete their daily tasks, they waste time searching for and collecting information, they often enter the same data multiple times, and they can end up basing decisions on outdated or erroneous data.

A solution that bridges the gap between the enterprise system and the worker desktop provides information workers with access to contextual information in enterprise applications through the familiar desktop environment, reducing the amount of time spent searching for information. This allows information workers to realize new levels of productivity and effectiveness without the need to learn new applications.

Enabling Employees to Focus on Core Tasks

As organizations strive to achieve high levels of productivity, they have equipped information workers with various tools to perform their jobs. Ironically, this variety of applications actually burdens employees with the need to constantly switch between desktop and business applications to complete their tasks. On top of that, differences among the various enterprise applications make it difficult to easily interact with those applications, as information workers are not familiar with the functionalities and interfaces. The ideal solution integrates the desktop and enterprise worlds so that employees have a seamless user experience. This continuity between the desktop and enterprise applications simplifies normally complex tasks and allows employees to focus on their main assignments.

How difficult is it to bridge the gap between enterprise and desktop productivity applications? From an IT perspective, most of the required landscape is already in place. Desktop productivity tools such as Microsoft Office have become corporate standards, and many organizations already utilize best-practice processes within their enterprise applications. Because information workers are intimately familiar with desktop applications, their productivity can be quickly enhanced through processes made available via the desktop application interface.

THE INFORMATION WORKPLACE IN ACTION

Let us examine how the ideal solution would change the way time management is handled. For employees who need to bill on the basis of hours spent on a project, the ideal solution would simplify the entire process by eliminating the need for time sheets, memorization of billing codes, manual data collection from multiple business systems, and questions about cost centers.

With the ideal solution, when information workers would set up a meeting online or offline using an application such as Microsoft Outlook, they would be automatically prompted with questions that facilitate account charges. The solution would present relevant accounts, with the most recently charged account selected as the default. If an employee extended the length of a meeting using the calendar application, the appropriate billing updates would be automatically performed in the enterprise application.

The solution would display pertinent information such as the total hours billed to the account and account budgets. It would provide quick reference links so employees could view detailed statistics and company policies. If a manager needed to approve the charge, the system could alert the appropriate manager to help ensure budget compliance.

Essentially, the solution would provide employees with access to the relevant information for the task being undertaken, eliminating the time spent searching for information, while enhancing the decision-making process.

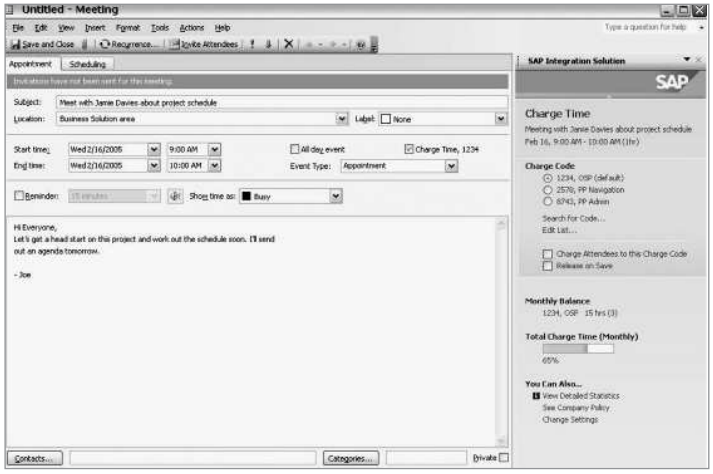

Figure 1: Improved Time Management in the Information Workplace

HOW "MENDOCINO" REVOLUTIONIZES ACCESS TO ENTERPRISE DATA

Now, a jointly developed and designed product from Microsoft and SAP – code-named "Mendocino" – delivers information worker productivity by uniting the ease of use and the ubiquitous nature of Microsoft Office Professional Edition 2003 with the organizational, process-driven power of the mySAP™ ERP solution.

"Mendocino" is designed to empower information workers by making enterprise information and processes available right at their fingertips, in an environment familiar to them. This eliminates any overreliance on business application experts and fundamentally changes the way employees work by simplifying access to enterprise system knowledge, enhancing productivity and decision making, and ensuring compliance with corporate standards and policies.

Although an enterprise portal is needed to gain full access to SAP® business applications, often all that information workers require is quick access to some simple processes, such as billable time entry or budget monitoring. By leveraging the openness

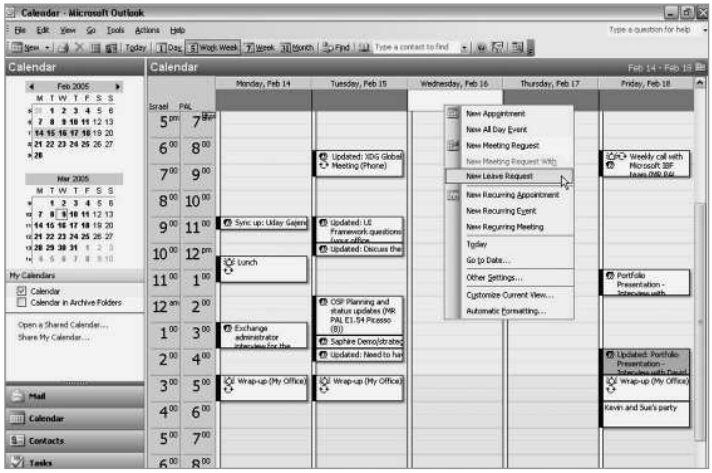

Figure 2: Enterprise Information Viewed Through a Familiar Interface

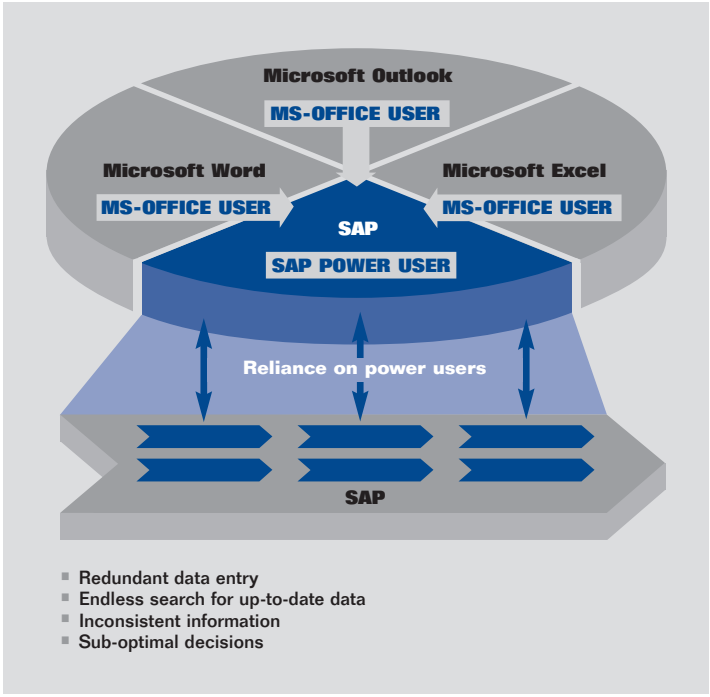

Figure 3: Today's Workers Relying on Power Users

of the Enterprise Services Architecture (ESA) blueprint from SAP and the .NET architecture from Microsoft, "Mendocino" extends and automates business processes from the mySAP ERP solution – reusing, integrating, and orchestrating functionality from existing application assets all within the familiar but advanced Microsoft Office Professional Edition 2003 user interface. In other words, via ESA, the functionality of the mySAP Business Suite solutions will be available as enterprise services, which information workers can access through a front-end application such as Microsoft Office Professional Edition 2003. Combining collaboration and analytics, "Mendocino" provides role-relevant views of information while retaining process context.

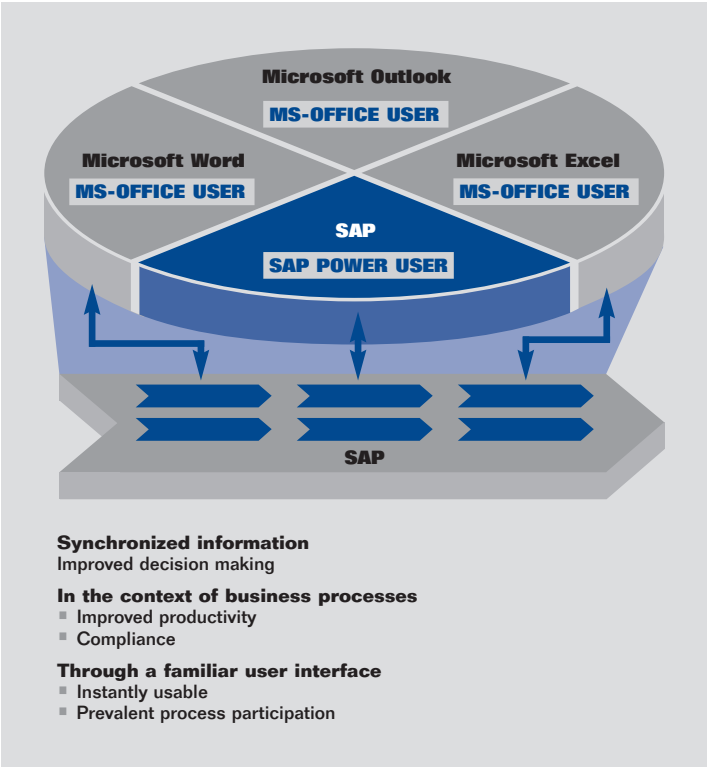

Figure 4: Power of Enterprise Applications Available to All Workers

Extending Enterprise Processes to the Desktop

By enabling information workers to access the data and process functionality of SAP enterprise solutions without leaving the familiar user interface of Microsoft Office Professional Edition 2003, "Mendocino" extends the value of existing SAP and Microsoft investments across the entire enterprise to every information worker. "Mendocino" provides employees with an interface option they are accustomed to – in addition to portal and mobile device interfaces – in order for them to access enterprise processes.

The product offers the following capabilities:

- **Report distribution**
  Information workers can display analytic and transactional reports from SAP applications in formatted or customized Excel sheets.
- **Alerts and notifications**
  Employees can receive SAP event-based alerts and notifications in Outlook from multiple SAP back ends on the basis of business rules they set.
- **Form-based approval process**
  Using standard or customized (Outlook and InfoPath) forms, information workers can perform business tasks that require form-based approval of authorized users.
- **Offline capabilities**
  Once online, information workers can leverage offline capabilities to fill out forms and make data adjustments – with automatic data synchronization with, and form submission to, SAP systems.
- **Personalization**
  From Outlook, information workers gain role-based and personalized access to, and adjustment of, SAP information.

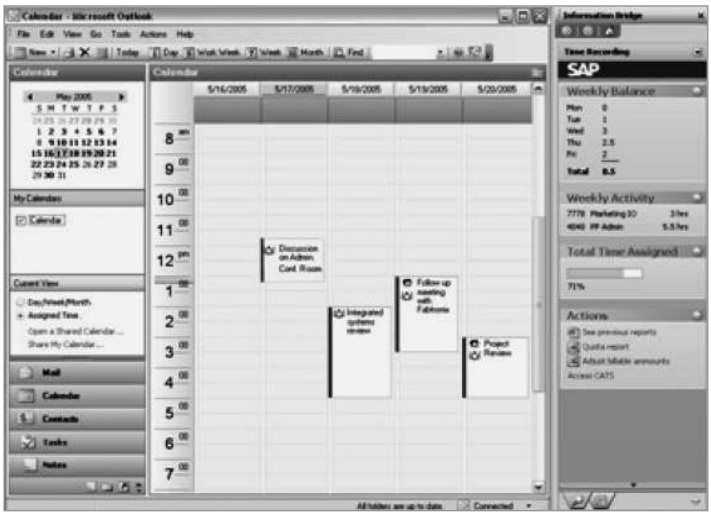

Figure 5: Assigning Time to Projects in mySAP™ ERP from Outlook

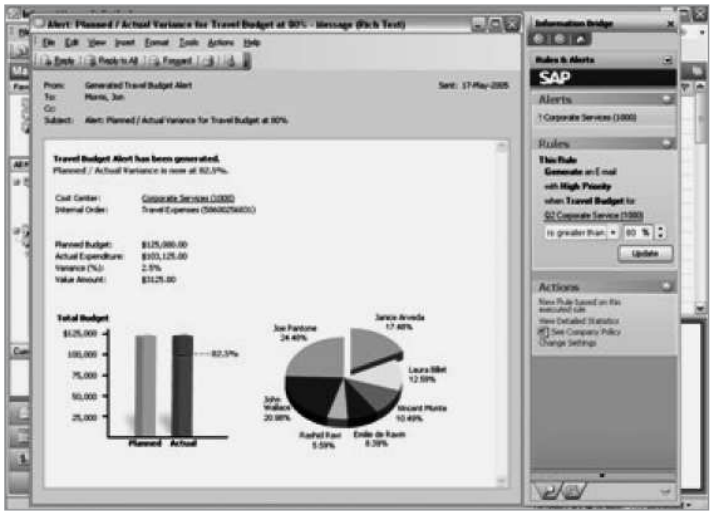

Figure 6: Receiving Budget Alerts and Notifications in Outlook

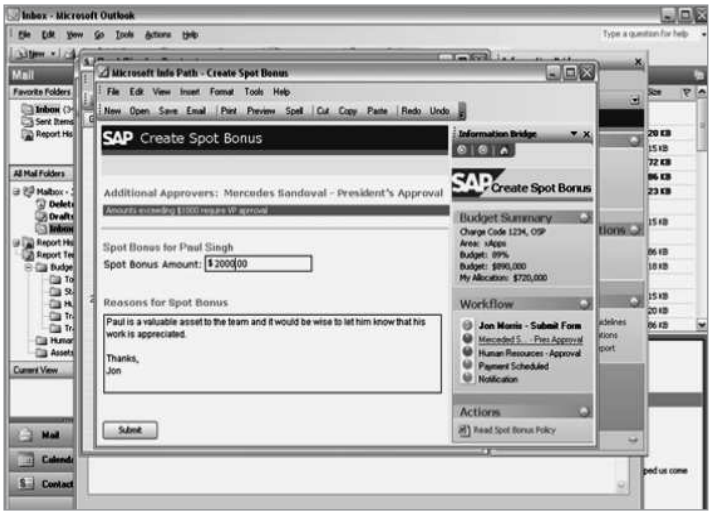

Figure 7: Triggering Bonus Requests in mySAP™ ERP from Outlook

- **Object synchronization**
  Employees can obtain contextual information from SAP applications while performing daily tasks in Outlook, and can automatically synchronize data between these applications.

Through these capabilities, information workers and managers realize greater efficiency and flexibility with manager and self-service processes such as the following:

- **Time management**
  Workers can use the Outlook calendar for time reporting, streamlining time entry while ensuring time-reporting compliance.
- **Budget monitoring**
  Reports from SAP applications can be received in Outlook in-boxes and then used offline, which allows managers to effectively monitor the budget by being proactively alerted to time-critical information.
- **Leave management**
  Workers can submit leave requests as calendar items integrated with approval guidelines and business-defined processes stored in SAP applications.
- **Organization management**
  Managers can access up-to-date information about employees, open positions, and organizational structures that are integrated from the mySAP ERP Human Capital Management (mySAP ERP HCM) solution in Outlook contacts and Microsoft Office Professional Edition 2003 documents.

BENEFITS OF LINKING INFORMATION WORKERS TO ENTERPRISE APPLICATIONS

When employees can easily access enterprise applications and knowledge from within the familiar environment of Microsoft Office Professional Edition 2003 applications, organizations realize a number of benefits, including the following:

- Improved collaboration and decision making
- Enhanced productivity
- Intuitive access to enterprise processes

Improved Collaboration and Decision Making

"Mendocino" allows information workers to access critical, up-to-date business information from mySAP ERP using Microsoft Office Professional Edition 2003 applications. With references to those information sources, decision makers have access to a current, consistent view of information, enabling them to more efficiently communicate, collaborate, and make informed business decisions. At the same time, the traceability and transparency of information throughout the enterprise help satisfy regulatory compliance requirements.

Enhanced Productivity

"Mendocino" enables information workers to view and act on information from mySAP ERP within the context of Microsoft Office Professional Edition 2003 documents and e-mail messages, helping to eliminate time-consuming and costly manual processes associated with information discovery and integration. By integrating enterprise processes with Microsoft Office Professional Edition 2003 applications, "Mendocino" reduces the complexity of more advanced tasks and increases the transparency of simpler tasks traditionally handled via a dedicated user interface, such as that provided by the SAP NetWeaver® Portal component.

Intuitive Access to Enterprise Processes

With "Mendocino," information workers can initiate a range of business processes and perform a greater portion of their daily tasks from within the familiar, comfortable Microsoft Office environment. By making it easier to connect Microsoft Office Professional Edition 2003 applications to mySAP ERP, "Mendocino" helps organizations realize greater value from their investments in SAP and Microsoft Office solutions. In addition, because "Mendocino" runs within the Microsoft Office Professional Edition 2003 environment that employees use on a daily basis, costs associated with training are minimized.

BENEFITS FOR DEVELOPERS AND IT PROFESSIONALS

Developers and IT professionals responsible for aligning IT and business objectives will benefit from the following "Mendocino" capabilities:

- Unique interoperability
- Metadata-driven architecture
- Robust security and comprehensive configuration

Unique Interoperability

Microsoft and SAP product development teams are working together to deliver the best user, development, and administrative experience in "Mendocino."

Metadata-Driven Architecture

The metadata-driven architecture underlying "Mendocino" provides an extensible platform to make enterprise data stored in SAP solutions accessible and usable by the broadest set of users in the organization.

Robust Security and Comprehensive Configuration

Applications delivered with "Mendocino" are sophisticated enough to recognize which commonly used SAP application information is available in a particular environment, yet they are easily configurable. For instance, organizations can take advantage of robust and flexible security authentication and authorization capabilities to control data access.

GOING FORWARD WITH "MENDOCINO"

"Mendocino" increases the value of existing IT investments by putting the power of enterprise systems at the fingertips of every information worker. With "Mendocino" version 1.0, self-service and line-of-business processes are extended from mySAP ERP into Microsoft Office Professional Edition 2003. In future versions, SAP plans to add support for Microsoft Office 12 (the successor to Office 2003), as well as support for additional business processes, such as customer and supplier relationship management. In addition, SAP plans to include tools that enable customers and independent software vendors (ISVs) to create their own "Mendocino"-based applications. For instance, using "Mendocino," ISVs will be able to extend the functionality of their offerings into Microsoft Office or integrate their offerings into the business processes supported by "Mendocino."

For more information about how "Mendocino" can help your organization deliver the power of enterprise systems to the desktop, please contact your SAP account executive or visit **www.sap.com/mendocino** or **www.microsoft.com/office/sap**.

www.sap.com/contactsap

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