

# SAP

George Anderson
Danielle Larocca



#### Sams Teach Yourself SAP in 24 Hours, Second Edition

Copyright © 2006 by Sams Publishing

All rights reserved. No part of this book shall be reproduced, stored in a retrieval system, or transmitted by any means, electronic, mechanical, photocopying, recording, or otherwise, without written permission from the publisher. No patent liability is assumed with respect to the use of the information contained herein. Although every precaution has been taken in the preparation of this book, the publisher and author assume no responsibility for errors or omissions. Nor is any liability assumed for damages resulting from the use of the information contained herein.

International Standard Book Number: 0-672-32822-4 Library of Congress Catalog Card Number: 2005930224

Printed in the United States of America

First Printing: November 2005

08 07 06 05 4 3 2 1

#### **Trademarks**

All terms mentioned in this book that are known to be trademarks or service marks have been appropriately capitalized. Sams Publishing cannot attest to the accuracy of this information. Use of a term in this book should not be regarded as affecting the validity of any trademark or service mark.

#### **Warning and Disclaimer**

Every effort has been made to make this book as complete and as accurate as possible, but no warranty or fitness is implied. The information provided is on an "as is" basis. The authors and the publisher shall have neither liability nor responsibility to any person or entity with respect to any loss or damages arising from the information contained in this book or from the use of the CD or programs accompanying it.

#### **Bulk Sales**

Sams Publishing offers excellent discounts on this book when ordered in quantity for bulk purchases or special sales. For more information, please contact

U.S. Corporate and Government Sales 1-800-382-3419 corpsales@pearsontechgroup.com

For sales outside of the U.S., please contact

International Sales international@pearsoned.com

#### **Publisher**

Paul Boger

#### **Acquisitions Editor**

Loretta Yates

#### **Development Editor**

Songlin Qiu

#### **Managing Editor**

Charlotte Clapp

#### **Senior Project Editor**

Matthew Purcell

#### Copy Editor

Kezia Endsley

#### Indexer

Chris Barrick

#### Proofreader

Jessica McCarty

#### **Technical Editor**

AJ Whalen

#### **Publishing Coordinator**

Cindy Teeters

#### Designer

Gary Adair

#### Page Layout

Kelly Maish

#### **HOUR 22**

## Integration with Microsoft Office

Integration between SAP and Microsoft's products is nothing new. Using object linking and embedding (OLE), a concept introduced in Hour 14, "Technology Overview," it has long been possible to drop your SAP data into a Microsoft application. In this way, additional analysis of your ECC, R/3, APO, and other list- and simple report-based SAP data sources can be easily accomplished through Microsoft Excel, Access, and so on. And with the latest joint announcements between SAP and Microsoft—code-named *Mendocino*—this integration continues to grow deeper and more valuable, adding Microsoft Exchange, Outlook, other database sources, and more to the list of Microsoft products that afford better integration with SAP.

Highlights of this hour include

- ▶ Using SAP's %pc functionality to save SAP data
- ▶ Moving SAP data into Microsoft Excel, Word, and Access
- ► Review of Mendocino
- ► How Mendocino impacts end-user productivity

## SAP and MS Office Integration Architecture

Integration between SAP and Microsoft products hinges upon the use of OLE, a common and standard technology for transferring and sharing information among applications. With OLE, you can take data out of your SAP system and place it into another system, all the while maintaining the format and integrity of the data. For example, you can view data residing in any number of SAP database tables as a series of columns and rows in Microsoft Excel—an easy way to view and manipulate data otherwise trapped in the SAP database.

The SAP Assistant is the OLE interface used for calling SAP functions and transactions from other non-SAP applications. The SAP Assistant exposes both ActiveX controls and OLE object classes, for logging in to SAP, managing data and tables, calling functions and transactions, and more. SAP systems are therefore designed today so that you can share data with any OLE-compatible application. Sample OLE-compatible applications include

- ▶ Microsoft Office, including Visio and other products
- ► Corel Office, including Paradox
- Star Office
- ► Lotus Smart Suite
- ▶ Many Web Server development environments, such as Microsoft FrontPage

Additionally, nearly all modern application development languages in use today support OLE. This includes the old-school C++ programming language as well as the latest and greatest Microsoft .NET Visual Basic offerings, to IBM's WebSphere Information Integrator and PowerBuilder by Sybase. In this way, the developer of a non-SAP application can create objects that can access information in SAP.

#### Using %pc to Download Data

There are many ways to share data between SAP and Microsoft. As I briefly mentioned in previous hours, executing %pc in the transaction dialog box is an excellent and expedient way of moving data from SAP lists into other formats. Transactions that display their data via OCX controls—in various panels, each with its own data sources, constructs, and so on—are generally not good candidates for %pc. That is, OCX-based output typically does not lend itself to being downloaded into a PC format such as XLS, RTF, and so on. But transactions that are displayed in list format—most of them, to some degree—are excellent candidates for this method of downloading SAP data into Microsoft Office—based formats.

To save SAP list-based output to a file on your desktop or the network, enter the characters **%pc** in the transaction dialog box and then press Enter. A print window pops up (see Figure 22.1), defaulting to saving the screen's contents in an unconverted file format. Choose the format most appropriate for your immediate needs, press Enter, browse to the desired directory path, type the name of the output file you want to create, and then press Save to save the list data to the filename you specified.



## FIGURE 22.1 Saving SAP data in a number of formats is easily and quickly accomplished by using %pc.

#### **Exporting SAP Data to Microsoft Excel**

Microsoft Excel provides a user-friendly format and helpful tools to assist you in the process of analyzing and presenting data. To get your SAP data into Microsoft Excel, you can employ several methods. The most basic method involves the System List function, which enables you to save lists displayed on your SAP screen.

If you want to save your downloaded SAP list in Microsoft Excel, be sure to select File, Save As and then select the Microsoft Excel Workbook (\*.xls) option in the Save As type box or your spreadsheet; otherwise, by default, it is saved in a text format.



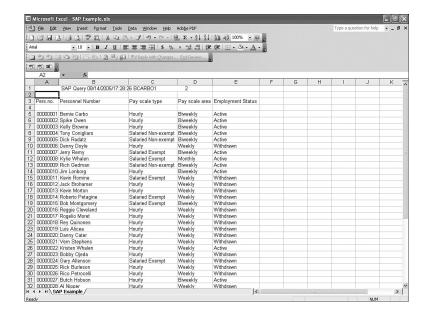
You can also use the SAP Query tool to export data to Microsoft Excel, as follows:

- **1.** Execute an SAP Query, as discussed in Hour 20, "Reporting Tools in SAP (SAP Query, InfoSet Query, Ad Hoc Query, and QuickViewer)."
- **2.** The options listed on the selection screen enable you to designate the type of output you want for your report. For a basic transfer to a Microsoft Excel spreadsheet, select the Display As Table radio button.
- **3.** From here, select the List, Save, Local File to download this table into Microsoft Excel. A Save As box appears, enabling you to select the download file format. Be sure to select the spreadsheet option.
- **4.** After the download is complete, start Microsoft Excel and open the data you have just saved (see Figure 22.2).
- **5.** Return to your SAP Query output screen displaying your table.

You can use the same method detailed previously to download InfoSet or other "ad hoc" queries, as covered in Hour 20.



# FIGURE 22.2 Your Microsoft Excel spreadsheet containing your SAP Query data looks the same as the data in your original query output.

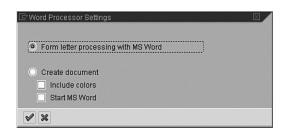


#### **Creating SAP Form Letters in Microsoft Word**

SAP has a great interface for creating form letters using Microsoft Word. This tool has endless possibilities for your company. For an example, let's assume you need to output SAP Human Resources employee data into Microsoft Word so that you can create a form letter to all employees.

- **1.** Select a query to execute.
- **2.** From the selection screen, use the Display As Table option and then execute your report.
- **3.** When the output appears, rather than saving this file to Microsoft Excel, select the Word Processing button at the top of your Query Output. Doing so opens the Word Processor Settings dialog box shown in Figure 22.3. Press Enter to continue.

#### FIGURE 22.3 SAP's Word Processor Settings dialog boxes enable you to download your SAP data into Microsoft Word.



**4.** The dialog box that is displayed presents you with a number of options. You can designate whether you want to create a new Word document, use a current Word document (one that is currently "open" on your system), or use an existing Word document (one that is saved on your computer). Click the green check mark to begin the merge between SAP and Microsoft Word. Upon execution, SAP opens Microsoft Word (see Figure 22.4).

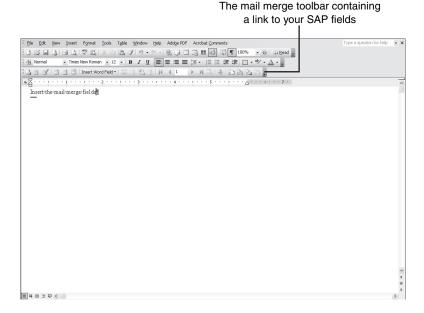


FIGURE 22.4
A Microsoft
Word application launches
with a new doc-

ument.

- 5. An important thing to note is that your Microsoft Word application now contains a new mail merge toolbar that gives you the capability to insert your SAP fields into your Microsoft Word form letter. In Microsoft Word, press the Enter key to begin at a new line, and then select the Insert Merge Field button on the toolbar. In the drop-down list (or the Insert Merge Field pop-up window, in the case of Microsoft Office 2003), shown in Figure 22.5, you see all the SAP fields contained in your original SAP Query.
- **6.** As appropriate for your needs, select one of your SAP fields. It appears in brackets in your Microsoft Word document. Press Enter and insert another SAP field. Type some text into your Microsoft Word document, and then insert another SAP field (see Figure 22.6).

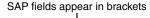
#### FIGURE 22.5

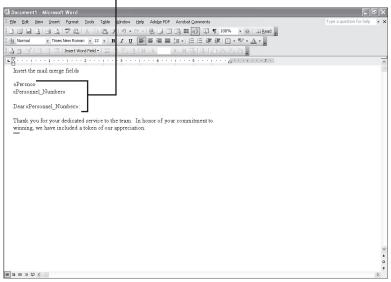
The Microsoft Word Insert Merge Field button contains the names of your SAP fields from your SAP Query.



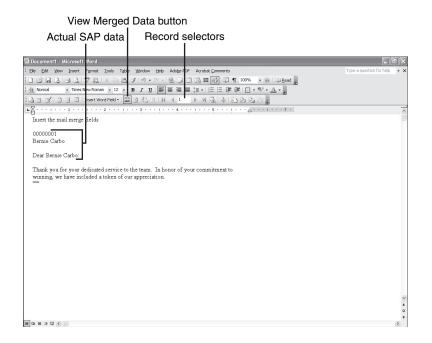
#### **FIGURE 22.6**

Your Microsoft Word form letter contains the inserted fields from your SAP Query in addition to any text you typed manually.





- **7.** To preview the output of your form letter, click the ABC (View Merged Data) button from the mail merge toolbar, shown in Figure 22.7.
- **8.** Use the Record selectors (forward and backward) buttons on the mail merge toolbar to view the various records.



#### FIGURE 22.7 A sample Microsoft Word form letter containing the SAP fields from your SAP Query, in the View Merged Data view.

You can save your Microsoft Word merge document for repeated use. Next time you want to use the same form letter (but with the latest data from SAP), you need to reopen the SAP Query that serves as the source of the document, select the List, Word processing option from the menu, and then select the existing Word document radio button. You are then prompted to enter the name of your Word document where you saved the file. Microsoft Word will launch, displaying your existing form letter containing the latest data from your SAP system.



#### **Exporting SAP to Microsoft Access**

As you have seen, exporting SAP data to Microsoft Excel and Word is useful when it comes to performing further offline manipulation of your data, for creating reports and graphs, or for drafting form letters. Exporting data to a Microsoft Access database is quite useful, too, when it comes to general reporting.

Exporting to Microsoft Access is helpful as well when you want to compare data among multiple systems. For example, if your company stores your vendor master data in SAP and it also stores vendor master data in a non-SAP application (and you have not implemented SAP Exchange Infrastructure with Master Data Management), you can use Microsoft Access as a tool to quickly compare the two sources relative to overall data consistency.



The initial steps to export data into Microsoft Access are the same as the steps to download a file into Microsoft Excel—the idea is to get the data into the Excel XLS format. Verify this is the case before proceeding.

#### Watch

Depending on your Microsoft Excel configuration, you might have to perform a few extra steps here:

- 1. Launch Microsoft Excel and open the spreadsheet you saved earlier.
- 2. In Excel, use the menu path File, Save As—as if you were going to save the file again.
- Take a close look at the Save As Type box; ensure that the file is saved as a Microsoft Excel Worksheet and not any other format.

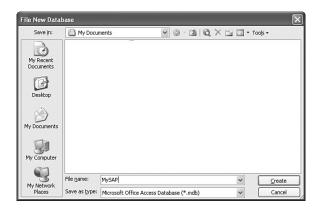
Alternatively, view and verify the extension of the file using Microsoft's Explorer.

#### **Importing SAP into Microsoft Access**

After the XLS file resides on your local system or an accessible file share, you need to import this file into Microsoft Access (the following steps assume Access has been installed on your system; given that Access is not included with all versions of Microsoft Office, this might not be the case by default):

- **1.** Launch Microsoft Access on your system.
- 2. From this initial window, select the Blank Database option, and then click OK. You are prompted to create a name and to select a location for your database. In this example, I selected the C:\My Documents directory and named the database MySAP.mdb, as shown in Figure 22.8.





**3.** Click the Create button; you then see the main Microsoft Access window, which appears in Figure 22.9.

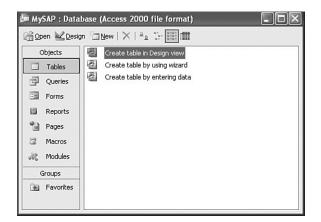


FIGURE 22.9
The Microsoft
Access database main window displays
the different
database elements.

**4.** To bring the SAP data into Microsoft Access, use the Microsoft Access menu path File, Get External Data, Import. You are then prompted with a window similar to the one shown in Figure 22.10. This is where you have to input the location and filename of the output file you saved earlier. By default, the Files of Type box lists Microsoft Access (\*.mdb). You have to change this to Microsoft Excel (\*.xls).

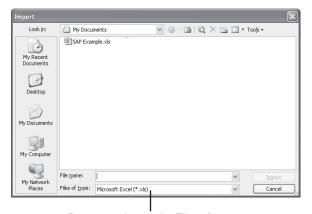


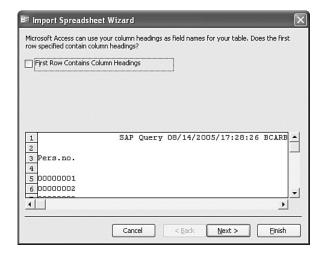
FIGURE 22.10
Select your
import file location in the
Microsoft
Access Import
window.

Be sure to change the Files of type drop-down box to reflect Microsoft Excel

**5.** After changing the Files of Type box and selecting your file, click Import. Just as in the Microsoft Excel import, in Access you are presented with an Import Spreadsheet Wizard similar to the one shown in Figure 22.11.

#### **FIGURE 22.11**

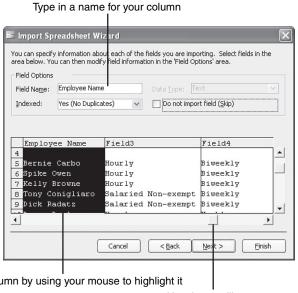
The Microsoft Access Import Spreadsheet Wizard assists you in importing your file.



6. On the first screen of the Import Spreadsheet Wizard, click the Next button to continue. On the second screen, it asks whether you want to create a new table or add the data to an existing table. To create a new Access database table containing your SAP data, click Next. The next window, shown in Figure 22.12, gives you an opportunity to name each of your fields.

#### **FIGURE 22.12**

The Microsoft Access Import Spreadsheet Wizard field enables individual field specification and more.



Select a column by using your mouse to highlight it

Use the scrollbar to navigate through your file

- **7.** By selecting each column (use your mouse to do so), you can type a field name for each. After you have named all your fields, click Next.
- **8.** The following screen enables you to assign a unique identifying number for each of your records, to be used as a primary key (primary keys are discussed in Hour 3, "Database Basics"). Click the Next button to continue.
- **9.** The last screen asks you to provide a name for your table. Type MySAP and click Finish. Microsoft Access then presents you with a confirmation window similar to that shown in Figure 22.13.



The Microsoft Access confirmation window declares that your data has finished

importing.

- **10.** Click OK in the final Import Spreadsheet Wizard confirmation window; you are returned to the Microsoft Access main window, and your new table is now listed under the Table tab.
- **11.** To take a look at your table, select it and then click the Open button. Your SAP list now appears as a Microsoft Access table (see Figure 22.14); it includes an additional primary key field as well.

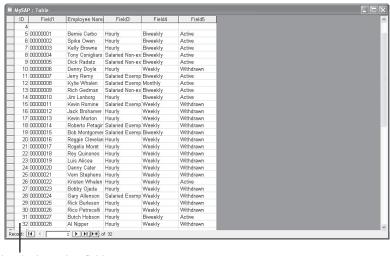


FIGURE 22.14
Your SAP data
now appears in
a Microsoft
Access database table.

Note the additional primary key field

This process is certainly a few steps longer than exporting your SAP data into Microsoft Excel. However, Microsoft Access is a sound reporting tool used by a large number of SAP customers as their primary reporting tool—especially when other applications or tools like SAP Business Warehouse, Strategic Enterprise Management, Cognos, or Crystal Reports are unavailable. Its prevalence also speaks to the fact that Microsoft Access is popular across many companies regardless of size.

Another reason for its popularity is that Microsoft Access is simple to use. It leverages simple report wizards to guide you step-by-step in creating comprehensive reports. Now you will create one sample report using a Microsoft Access Report Wizard.

#### **The Microsoft Access Report Wizard**

Creating reports in Microsoft Access is easy using a tool called the Microsoft Access Report Wizard. The use of reports wizards simplifies the layout process of your fields by visually stepping you through a series of questions about the type of report that you want to create. The wizard walks you through the step-by-step creation of a report, while behind the scenes Access is formatting, grouping, and sorting your report based on selections you make.

Instead of having to create a report from scratch, Microsoft Access provides a number of standard report formats. Some of these, like tabular and columnar reports, mail-merge reports, and mailing label formats, lend themselves to meeting basic reporting requirements. Reports created using the Microsoft Access Report Wizard can also be customized to fit your needs. To use the Report Wizard, perform the following steps:

- **1.** Close any open Access databases by using the menu path File, Close.
- 2. In the main Microsoft Access database window, click Reports.
- **3.** From here, click the New button to launch the Microsoft Access Report Wizard (or choose the option to create a report in Design view).
- **4.** Assuming you are running the Report Wizard, select the Report Wizard option in the top box and your table name in the second box. Click OK to proceed.
- **5.** Next, you are presented with a field selection screen. From this screen, you can select which fields are output to your report. Select a field by highlighting it with your mouse, and then use the Next button to include it in the report. In the example, I selected the Employment Status field, as shown in Figure 22.15.

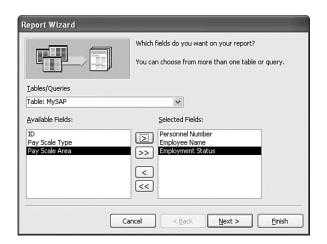


FIGURE 22.15
The Microsoft
Access Report
Wizard field
selection window enables
you to specify
which fields you
want to include
in your report
output.

- **6.** After you click Next, the Report Wizard asks whether you want to add any grouping levels to your report. This is a helpful step when you are creating a report where you might want to group and subtotal portions of the output. For this example, you don't need grouping or subtotaling, so click the Next button to continue.
- **7.** Now identify your sort order criteria. In the example, shown in Figure 22.16, I have sorted according to Employee Name.

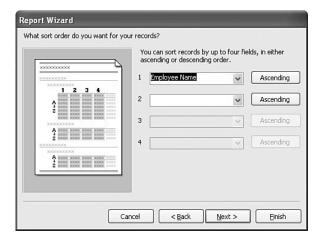


FIGURE 22.16
The Microsoft
Access Report
Wizard enables
you to select
multiple sorting
criteria.

**8.** The Report Wizard enables you to specify formatting criteria. The orientation of the report (portrait or landscape) and the layout of the report (columnar, tabular, or justified) are designated on this screen. After making a selection, click Next.

- **9.** You can choose from a selection of predefined formats for your report. After making a selection, click Next.
- **10.** The last step asks you to type a name for your report. Do so, and click Finish to complete the creation of your report.



Advanced Microsoft Access users can write a macro that automatically retrieves the latest SAP download file and imports it in to your existing Microsoft Access table—replacing the old data and thus automating the Microsoft Access import process. For more information on this function, search the Microsoft Access help for "automate importing."

In the same way, advanced ABAP or Java programmers can write a program that automatically generates a file that can be used for the download portion of this process, thus automating the entire SAP-to-Access reporting process.

Microsoft Access is a great reporting tool that enables users with minimal Microsoft Access skills to create reports. Using Access, you can also include graphics in your reports, or you can create graphs and charts of your SAP data. If you take a few minutes to investigate the types of reports you can create using Microsoft Access, I'm sure you will discover the value of this reporting tool for SAP.

#### **Quick References**

The following sections provide simple step-by-step instructions for executing many of the reporting processes just discussed. Use the following sections as a quick reference to speed you through each respective reporting process. And remember, if you need more information, refer to each process's respective detailed sections provided earlier in this hour.

## Quick Reference for Exporting Lists to Microsoft Excel

The following is a recap of the steps required to use the System List function to export SAP lists to Microsoft Excel.

- **1.** Navigate to the SAP screen containing the list you want to output.
- **2.** Follow the menu path System, List, Save, Local File.
- **3.** Use the possible entries help button to change the location and filename of your new file.

- **4.** Click the Transfer button.
- 5. Launch Microsoft Excel and open the file.

## **Quick Reference for Exporting SAP Query Reports to Excel**

The following is a recap of the steps required to output SAP Query reports to Microsoft Excel.

- **1.** Execute the SAP Query report that contains the data that you want to include in your report.
- **2.** On the selection screen, select the Display As Table option, and execute the report.
- **3.** Select the List, Download to File menu option.
- **4.** Use the possible entries help button to change the location and filename of your new file.
- **5.** Click the Transfer button.
- 6. Launch Microsoft Excel and open the file.

## **Quick Reference for Creating Form Letters with Microsoft Word**

The following is a recap of the steps required to create SAP form letters using Microsoft Word.

- **1.** Execute the SAP Query report that contains the data that you want to include in your report.
- **2.** On the selection screen, select the Display As Table option, and execute the report.
- **3.** Select the List, Word Processing menu option.
- **4.** Click the Enter button on the Word Processing Settings dialog box.
- **5.** Select your required options from the MS Word Settings dialog box, and then click the Enter button.

- **6.** Type your document and insert merge fields using the Insert Merge Field button on the Microsoft Word mail merge toolbar.
- **7.** Use the ABC view merged data button to review your document and the record selection buttons to navigate between records.

## **Quick Reference for Exporting Lists to Microsoft Access**

The following is a recap of the steps required to use the System List function to export SAP lists into Microsoft Access. The initial steps of this process are the same for downloading files to Microsoft Excel.

- **1.** Navigate to the SAP screen containing the list you want to output.
- 2. Follow the menu path System, List, Save, Local File.
- **3.** Use the possible entries help button to change the location and filename of your new file.
- **4.** Click the Transfer button.
- **5.** Open your file in Microsoft Excel, and use the menu path File, Save As to save it as a Microsoft Excel worksheet. Close Excel.
- **6.** Launch Microsoft Access and create a new database.
- **7.** Use the menu path File, Get External Data, Import, and select your Microsoft Excel file to import the file in to Microsoft Access using the Import Spreadsheet Wizard.

## **Quick Reference for Exporting SAP Query Reports to Access**

The following is an explanation of the steps required to output an SAP Query report to Microsoft Access. The initial steps of this process are the same for downloading files to Microsoft Excel.

- **1.** Execute the SAP Query report that contains the data that you want to include in your report.
- **2.** On the selection screen, select the Display As Table option, and execute the report.
- **3.** Select the List, Download to File menu option.

- **4.** Use the possible entries help button (down arrow) to change the location and filename of your new file.
- **5.** Click the Transfer button.
- **6.** Open your file in Microsoft Excel, and use the menu path File, Save As to save it as a Microsoft Excel worksheet. Close Excel.
- 7. Launch Microsoft Access and create a new database.
- **8.** Use the menu path File, Get External Data, Import, and select your Microsoft Excel file to import the file in to Microsoft Access using the Import Spreadsheet Wizard.

#### **Mendocino Review**

Outside of the specific integration capabilities that OLE has historically made possible, SAP and Microsoft have worked together more recently to provide another level of integration. Called Mendocino, it's the first real joint product between the two giant software companies. Leveraging the openness of .NET-enabled Web Services and the capabilities of Enterprise Services Architecture (ESA), Mendocino enables Microsoft Office 2003 to extend and manage SAP-derived business process functions and the data traversing them.

Mendocino was announced in April 2005, made available in the final quarter of the year, and hailed as the "next big thing" for SAP/Microsoft integration. Its open interface enables independent software vendors (ISVs), other SAP customers, and systems integrators to extend workflows and improve functionality both in the "back office" and "front office" Microsoft product suites.

That is, Mendocino connects SAP with Outlook Exchange in the back-end, and with the usual Microsoft Office products like Excel and Word in the front-end. Additionally, Mendocino enables connectivity with other databases, servers, and clients. This is all accomplished through

- Extended Microsoft product application menus
- ► The use of an SAP-specific "smart pane"; SAP can pop up when it has something important to deliver or communicate
- Better business analytics made possible through Excel
- ▶ Better integration with Word via "smart" business documents

#### **Improving Productivity with Mendocino**

Mendocino improves end-user productivity by leveraging exposed business processes and Mendocino-improved desktop interfaces. What does this look like in the real world? As outlined here, the impact is widespread and compelling. Use Mendocino to

- ► Synchronize your SAP and Outlook calendars
- Synchronize SAP business processes with other processes managed through Microsoft products
- Conduct time-management activities and populate multiple data sources or impact extended business processes through a single interface (typically accomplished with SAP's Enterprise Portal or Microsoft's Outlook)
- View real-time data in SAP via Microsoft's products (as opposed to historical data often reflected by most reporting systems)
- Automate the creation and delivery of SAP reports via Microsoft Exchange and Outlook
- ▶ Bring together customer relationship management data with your meeting and conference call data, so that all relevant customer information, billing information, time-tracking data, and so on can be better leveraged for decision-making
- ▶ Deliver both "alerts" and "alert context" from SAP BW and then facilitate the execution of subsequent business processes—true management by exception

In the end, Mendocino helps SAP and Microsoft customers make the most of their respective investments. In doing so, it enables business processes to be extended and automated. This speeds up an organization's capability to intelligently respond to demands, and presumably serve customers, shareholders, and other stakeholders better than ever before.

#### **Summary**

Many tools on the market are designed to assist you in creating SAP reports. Yet with the integration naturally afforded by SAP for Microsoft's core suite of products, much of your reporting can be handled natively by SAP. This lesson gives you a look at how you can use Microsoft Excel, Word, and Access for such reporting purposes. Using the Microsoft Office family of products, you can therefore easily create the reports you need without expensive third-party tools, advanced technical knowledge, or the help of SAP technical professionals.

SAP's \*pc functionality makes it easy to dump data from SAP into any number of other application formats. The processes discussed in this hour also highlighted how you can use Microsoft Excel to download SAP data into standard Excel spreadsheets. You discovered that Microsoft Word is ideal for creating merged SAP-fed form letters and mailing labels. Microsoft Access also helps you conduct reporting as well as manage data between multiple systems; use it as a comparison tool for data that is stored outside of SAP. Finally, the enhanced integration afforded by the joint SAP/Microsoft initiative known as Mendocino promises not only excellent workflow benefits, but greater integration between SAP and Microsoft Office's entire suite of productivity tools.

#### Q&A

- **Q** Instead of using the reporting tools provided by SAP, can custom reports be created from scratch in SAP?
- **A** Custom reports can be created from scratch in all SAP applications. These reports (or *programs*, as they are called in SAP) are written in the ABAP or Java by an experienced programmer. Some companies create many customized reports and others rely on customized reports only when absolutely necessary.
- **Q** If SAP data is output to a Microsoft Excel spreadsheet and then the spreadsheet is edited, is it possible to get that updated data back into SAP?
- **A** The easy answer is yes, but it is no easy task. It requires the skills of a programmer who can write a program that can upload the data in to SAP.

#### Workshop

The workshop is designed to help you anticipate possible questions, review what you've learned, and begin thinking ahead about putting your knowledge into practice. The answers to the quiz that follows can be found in Appendix A, "Quiz Answers."

#### Quiz

- Name two methods you can use to create output files to be imported into Microsoft Excel.
- **2.** Which type of integration interface is most often used to communicate with Microsoft Office?

- 3. Which Microsoft application do you use to create SAP-supplied form letters?
- **4.** What does the term OLE mean?
- **5.** Name some additional OLE-compatible applications.

#### **Exercises**

- **1.** Create a file using the System List function and open the file in Microsoft Excel.
- **2.** Create a new Microsoft Word form letter using an existing Microsoft Word document.