SAP NetWeaver 精要丛书

阿恩德·戈贝尔(Arnd Goehel)
德克·里特哈勒(Dirk Ritthaler) 著

SAP企业门户

技术和编程(影印版)

Enterprise Portal: Technology and Programming

東方出版社 SAP PRESS

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東方出版社 SAP PRESS

著作权合同登记号
图字:01-2005-3505号

责任编辑：吴秋淑
封面设计：左　涛

图书在版编目(CIP)数据

SAP 企业门户：技术和编程/戈贝尔　等著；
北京:东方出版社，2005.6
ISBN 7-5060-2229-X
Ⅰ.S … Ⅱ.戈 … Ⅲ.①计算机②软件 Ⅵ. F91
中国版本图书馆CIP数据核字(2005)第051611号

SAP 企业门户：技术和编程(影印版)

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出版发行　東方出版社
地　　址　北京朝阳门内大街166号　　邮政编码 100086
电　　话　010—82665724 (编辑部)　　010—82665462 (发行部)
　　010—82679079 (生产部)
网　　址　http://www.erptraining.cn
经　　销　新华书店
印　　刷　山东新华印刷厂临沂厂
开　　本　787×1092毫米　1/16　　版　　次 2005年6月第1版
印　　张　19.75　　印　　次 2005年6月第1次
字　　数　364000　　定　　价 50.00元

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Preface

***Portal** [from Medieval Latin porta (city gate)]: the often imposing entrance to a church or cathedral. A portal provides access to the holy of holies.*

At first glance, the use of the term *portal* in information technology appears inappropriate. In the main sense of (IT) portals—the combination of Web content and applications—one could just as well speak of a center, much as one does of a call center. But portals are much more. They involve not only bundling information and applications, but also the targeted processing of decision-making documents so that employees, customers, and partners can make optimal decisions. Because such decisions require information from the *most holy* of IT systems, the term portal does not seem so inappropriate.

First, portals do more than use Web technologies to provide information and applications. They unify the information and applications so that users can work from an integrated interface. Portals also tailor information and applications so users don't have to expend considerable energy creating the configuration themselves. In addition, portals integrate structured and unstructured data from the Internet, a company's intranet, and other applications into the environment that is most conducive to supporting the users' productivity. Portals therefore help users to find, organize, and access information efficiently and effectively.

Secondly, portals build an integration platform for users; the actual technical components can hide behind the platform. A portal can partially fulfill user-oriented success factors for an application, such as *usability* and *look and feel*, and increase the acceptance of those applications that are critical to a company's success. This approach makes it much easier to exchange applications. Laborious product training and complicated installation procedures to heap the frontends of applications onto employees' personal computers are no longer needed. Even non-Web-enabled legacy applications can be integrated with a portal framework. And applications can be made available to customers, vendors, and partners instantly. Portals therefore can also lighten the load on administrators by reducing IT overhead.

Lastly, portals create consistent and context-sensitive access to Web services—the programming technology of the near future. In terms of tech-

nology, Web services consist of a structured, uniform, and content rich question–answer protocol that, by its very nature, does not include a user interface. A Java server page (JSP) or an active server page can be written quickly; however, if a Web service were to run alone in a Web browser, the page would have to handle all the context information and menu prompts itself. A portal also handles those tasks; it is the generic graphical user interface (GUI) of the future.

But the plug-and-play installation of portals is still at least several years away. The problem arises not because of the portals, but due to today's often extremely heterogeneous IT infrastructure. In the world of Web services, a portal installation consists primarily of configuration procedures. Today, however, various information and application sources must be adjusted to fit the portal, which can involve considerable effort. The critical precondition for a portal is that the company that wants to implement it can clearly identify *to whom* specific content should be displayed and *who* should make what decisions regarding IT support. That's why most portal projects are assembled with the discovery or rediscovery of company processes and structures. Technical, operative, and even social hurdles must be overcome.

This book takes a unique approach to these considerations. The authors demonstrate the various phases of a portal project and, based on their practical experience, show how to lead a portal project to a successful conclusion. Security is certainly an integral part of success: without appropriate security measures, a portal project poses an extremely high risk for the company—the risk of offering on a platter data worthy of protection to any Internet user interested in it. The authors address this concern thoroughly and offer several options to ensure the security of a portal.

Initially, portals were looked at with skeptical amusement. The benefits of portals were often questioned, especially after the hype related to e-business. But the changing basic IT architecture and Web services will make portals indispensable in the near future. This book contributes to the successful implementation of this important component of tomorrow's IT architecture.

Dr. Sachar Paulus
December 2004

1 Introduction

I would not lead you willingly astray,
But as regards this science, you will find
So hard it is to shun the erring way,
And so much hidden poison lies therein,
Which scarce can you discern from medicine.
Here too it is the best, to listen but to one,
And by the master's words to swear alone.
To sum up all--To words hold fast!
Then the safe gate securely pass'd,
You'll reach the lane of certainty at last.
Johann W. von Goethe, Faust—Part I

A great deal of time has passed since SAP crossed the narrow boundaries of enterprise resource planning (ERP) and introduced mySAP.com in 1999, and increasingly addressed communications and business processes among companies. Since then, the SAP portfolio of products—marketed today as *mySAP Business Suite*—has changed and expanded in a manner that could hardly be fathomed by those who can recall the good old days of SAP R/3. While the mapping and optimization of processes *within* a company—with the use of *one* comprehensive software package—characterized the 1990s, since then, the focus has effectively changed. The ability to map processes *between* companies, facilitate communication among employees working from widely separated locations, combine information from various sources into one uniform interface, and realize seamless collaboration between several applications characterize today's market.

Three levels of integration

The levels of integration that SAP now calls *the* challenge for the development of business software can be summarized as follows:

- Integration of customers, employees, and business partners
- Integration of existing information
- Integration of business processes

SAP NetWeaver

With its new integration and application platform, *SAP NetWeaver*, SAP has realized these three levels. *SAP Enterprise Portal (SAP EP)* plays a vital role here: it functions as a central component for the first two integration levels. It's well-suited to integrate and personalize the contents of a PC

interface in ways that have long been impossible, and it closely aligns a company's business partners with its employees.

But the functions of SAP EP go even further. Based on various technologies developed over the years, such as Drag&Relate or collaboration functions, SAP EP enables the display and smooth linking of information from the most varied of sources, and it fosters collaboration among widely separated employees of one or more companies.

Portal as a tandard interface

SAP Enterprise Portal has an important place in the overall strategy of SAP. It has been the standard interface for mySAP CRM since Release 3.1, and we can assume that it will increasingly replace the dynpro interfaces of additional solutions in mySAP Business Suite. In the long term, an SAP system landscape without SAP Enterprise Portal is simply inconceivable.

This book provides a detailed look at the technical abilities of SAP EP and its numerous options for integrating applications and information. It offers a solid foundation on several topics, including system requirements, installation, linking content, and security issues. In light of current development work, we intentionally wrote the book so that it would be valid for both SAP EP 5.0 and SAP EP 6.0; the text highlights the difference between the two releases where appropriate.

Structure of the book

Chapter 2 addresses the system landscape, including the requirements for installing SAP EP. It examines operating systems individually and deals with the peculiarities of individual components of the portal during installation.

With the use of a sample installation, **Chapter 3** illustrates how to set up SAP EP 5.0 in a Windows NT/2000 environment. Then, it shows you how to install SAP EP 6.0 in a UNIX environment. This chapter also explains how to create users and roles.

Chapter 4 describes a business application from the portfolio of mySAP products and an essential component of SAP NetWeaver—the SAP Business Information Warehouse (SAP BW). The functionality of these products is explained so far, that readers could understand, in terms of how to integrate content from SAP BW in the portal.

Chapter 5 builds on the topics covered in Chapter 4 and illustrates sample integration for the reporting, administration, and extraction levels. The chapter ends with an introduction to Drag&Relate functionality.

Chapter 6 provides a general overview of customer relationship management (CRM) and the characteristics of CRM that are specific to SAP.

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