SAP NetWeaver 精要丛书

斯蒂芬·卡奇（Steffen Karch）
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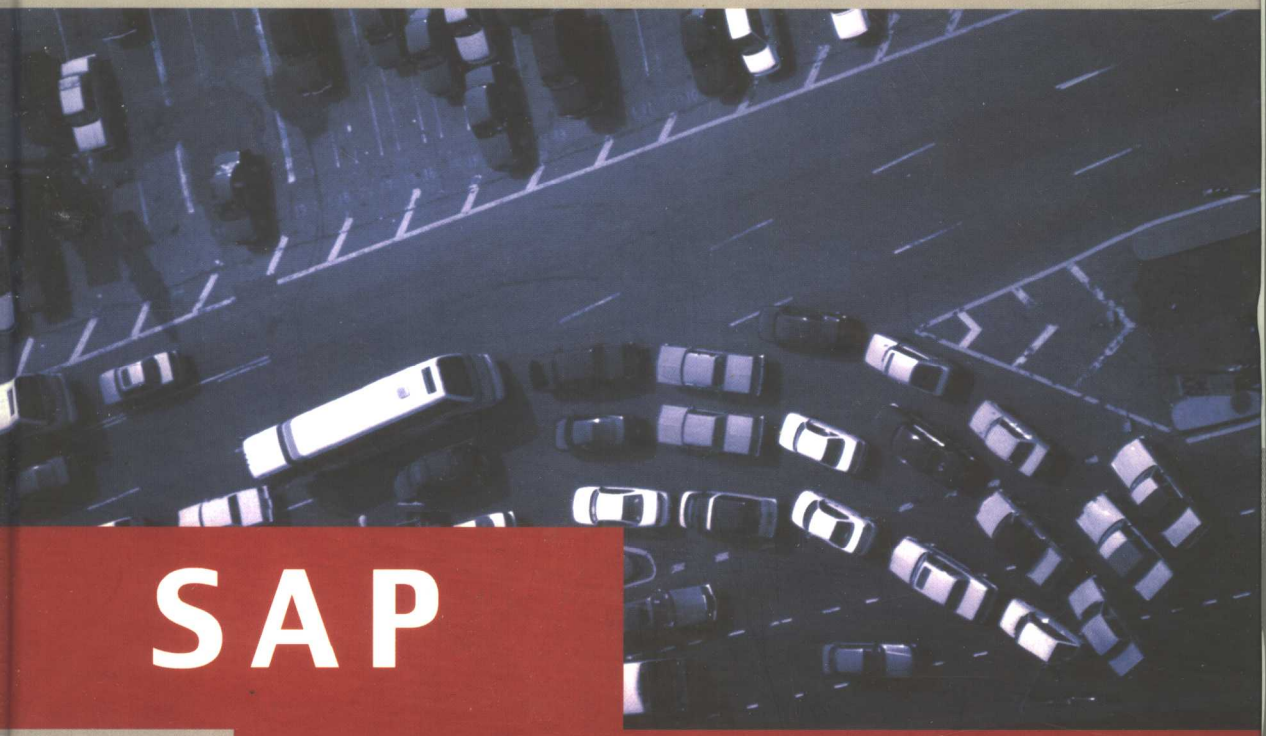

SAP NetWeaver™路线图（影印版）

SAP NetWeaver™ Roadmap

東方出版社 SAP PRESS

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图字:01-2005-3506号

责任编辑：吴秋淑
封面设计：左　涛

图书在版编目(CIP)数据

SAP NetWeaver™路线图/卡奇　等著；
北京:东方出版社，2005.6
ISBN 7-5060-2226-5
Ⅰ.S…Ⅱ.卡…Ⅲ.①计算机②软件　Ⅵ. F601
中国版本图书馆CIP数据核字(2005)第051600号

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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　364 000　　定　　价　50.00元

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1 Introduction

What is SAP NetWeaver, and how can a company benefit from it? What are the actual application fields in which SAP NetWeaver should be used? What is an Enterprise Services Architecture, and what advantages does it offer? These are just a few of the questions that will be addressed in this book.

With the increasing globalization of markets, the rules of competition are changing evermore rapidly and are forcing companies to make rapid changes as well. Given these circumstances, only those companies that can adapt their organization to make it flexible enough to meet current requirements can gain a competitive edge. However, very few companies are equipped with an information technology landscape that can cope with these ever-changing demands. The goal of the SAP NetWeaver technology platform is to act as an "Enabler of Change" by facilitating the necessary adjustments to processes.

SAP NetWeaver is an infrastructure software that supports the integration and development of heterogeneous system landscapes as they are typically found in companies today. This can take place on four different levels:

- At the *front end*, particularly via a portal
- On the *information* level, for example, with a Business Intelligence system
- On the *application side*, for a cross-company integration of processes
- At the *back end*, using the application server

The SAP NetWeaver Value Proposition

This proposition is based on the concept of a company-wide integration of business data that SAP has already made so successful. Unlike SAP R/2 and SAP R/3, the focus with SAP NetWeaver lies with the *integration of all data*—even data that is saved and processed outside an SAP system. Because SAP NetWeaver is a technology software, the individual NetWeaver components have no direct relationship to processes, but function as the technical basis for enabling the processes to run across the entire system.

Overview

With NetWeaver, SAP promises a solution that enables every company to achieve the three essential goals of *Cost Reduction* (reduction of the Total Cost of Ownership—TCO), *Innovation,* and *Flexibility*. By making Web

services and the use of these services available, SAP NetWeaver also creates the need for restructuring the IT architecture to turn it into an Enterprise Services Architecture (ESA). What sets this modern type of integration architecture apart is that processes can be adapted much more rapidly and flexibly than is possible with a client/server architecture. **Chapter 2** provides a comprehensive overview of the requirements for this architecture and how it can be technically achieved using ESA.

Evaluation

Since the end of the e-business hype, every investment decision made must now prove cost-efficient, particularly when choosing a software product. An installation must prove its usefulness by solving the problems surrounding Return on Investment (ROI) and TCO. In **Chapter 3,** the bases for an evaluation of a technology software are explained and applied to the SAP NetWeaver product in Chapters 4 to 7 using real-life examples. Here, the advantages of changing to the ESA architecture play a particularly significant role.

Real-life Scenarios

Once a company has decided to use SAP NetWeaver in its IT strategy, the necessary steps to implement this decision must be planned. In Chapters 4 to 7, four different, real-life examples based on actual customers' experiences are used to illustrate which problems can be solved with SAP NetWeaver and which kinds of approaches are appropriate. In terms of content, the scenarios and roadmaps are as follows:

- International automobile manufacturer (**Chapter 4**): *Automotive Inc.* wants to better serve its customers, and therefore requires detailed information from various sources, all of which must be merged into one standardized view.
- Module supplier (**Chapter 5**): *Car Doors Inc.* has to generate enormous growth to be able to remain independent. Successful management of the supply chain will be a key factor in deciding the future success of the company.
- Medium-sized gas provider (**Chapter 6**): *United Gas* must prepare its IT landscape for the requirements resulting from the liberalization of the gas market. A primary goal of United Gas is to always respond flexibly to customer requirements without this resulting in exploding costs.
- Large European financial institute (**Chapter 7**): The *ABC Bank* has far-reaching structural problems that can be solved only by trimming its vertical integration. Because this requires the outsourcing of parts of the process chain to partner companies, the bank must create a modern, integrated infrastructure.

Procedure Using a Roadmap

Generally, it is recommended that software as comprehensive and versatile as SAP NetWeaver be implemented in a step-by-step procedure. To aid in this, planning is done using a roadmap or a development plan specifying how the IT landscape of a company should change in the next three to five years. This very planning, based on business requirements, is found in the scenario descriptions.

Enterprise Services Architecture

SAP NetWeaver forms the basis for all current SAP products and will be used even more intensively in the future. This fact alone should be reason enough for IT departments to start using NetWeaver, but there are also additional reasons. One key reason is the fundamental changes to IT architecture that are about to take place. The use of Web services for easily integrating systems has a lasting effect on systems for managing business processes. Therefore, SAP has created the concept of *Enterprise Services Architecture* (ESA), which is presented in detail in **Chapter 8**. Using NetWeaver, client/server systems are gradually converted into an ESA. On the basis of the ESA, cross-application composite applications (for example, SAP xApps) can be run.

Components Contained in SAP NetWeaver

Chapter 9 explains the individual components contained in SAP NetWeaver (corresponding to the four integration levels):

- *SAP Enterprise Portal* for user integration
- *SAP Mobile Infrastructure* as the basis for mobile business
- *SAP Business Intelligence* for reporting and analysis
- *SAP Master Data Management* for consolidating and standardizing master data
- *SAP Exchange Infrastructure* for cross-company integration of processes
- *SAP Web Application Server* for J2EE and ABAP applications
- *SAP Solution Manager* for process management during the entire process life cycle
- *Composite Application Framework* as a basis for flexibly integrated, cross-system applications

The book ends with **Chapter 10**, in which we consider the changes that lie directly ahead for companies and their IT systems. Composite applications—xApps—afford a good solution for achieving the required flexibility for remaining competitive in the future. Every company should ask itself which strategy it can use to be successful in the future, and which preparations it must undertake, particularly in terms of IT.

Acknowledgements

Writing a book is not an easy task, and the particular form of this book, as a specific reference intended to provide a clear introduction to SAP NetWeaver, has demanded a great commitment from the authors.

In addition to the authors themselves, many others were involved in producing this book. We wish to express our gratitude to them.

First, we would like to thank Andreas Mayer from IBSolution GmbH. Due to his enormous breadth and depth of experience, he has made a huge contribution to ensuring that the real-life examples used in this book are of the highest quality.

A project such as this book can succeed only if the right information is available at the right time. We therefore wish to thank the following members of the SAP staff who were always ready to help: Jeffrey Word, Mathias Haendly, Thomas Mattern, Jürgen Kreuziger, Karsten Erxleben, and Franz-Josef Fritz. Special thanks is also due to Klaus Kreplin, who made so many things possible.

Oliver Hain from the DZ BANK shared his expertise on the topic of SAP NetWeaver at the ABC Bank (Chapter 7), for which we are very thankful. We also wish to thank Thorsten Scholz from IDS Scheer for the information he provided on ARIS for SAP NetWeaver.

Our thanks are also due to Gabriela Isop for the many wonderful images. She was supported in this work by André Kirchner.

Above all, a book needs a publishing house and an editor. Huge thanks are due to the publisher and especially to Tomas Wehren and Florian Zimniak. They supported us from the very outset in our idea for an SAP NetWeaver book, and thus helped to ensure that the book could be published in a timely manner.

We are especially pleased that the book can be published by SAP PRESS, which would not have been possible without the support of Bernhard Hochlehnert, editor at SAP.

Freiberg/Neckar, March 2005
Christian Bernhardt, Andreas Hardt, Frank Heidfeld, Loren Heilig, Steffen Karch, and **Roland Pfennig**