R/3 System Release 3.0

Highlights of a New Performance Dimension

SAP News:

Pioneering
New R/3 Release 3.0

Innovative
Linking Applications

Dynamic
SAP Business Workflow®

Intelligent
Desktop Integration

Comprehensive
ABAP/4® Development Workbench

Customer-oriented
SAP Services

SAP ®

R/3 SYSTEM RELEASE 3.0

By presenting Release 3.0 of the R/3 System on schedule, SAP reaffirms the reliability of its commitment to customers.

The R/3 System has rapidly developed into the world's leading standard client/server application software. CeBIT '95 marked the signing of the 3,000th R/3 contract won since SAP's client/server product hit the market in 1992. This demonstrates the level of trust companies have in SAP – companies of all sizes and from all industries – from global multinationals to mid-sized operations. At the same time, this milestone in the development of the R/3 System emphasizes the future-oriented strategy behind SAP's software concept, which uses information technology to provide complete support for all business processes.

This brochure introduces the new capabilities that Release 3.0 can provide your company. We are confident that the increased functionality and the many new features for optimizing your business processes will bring your company significant competitive advantages. We look forward to speaking with you.

Dietmar Hopp
Chairman of the SAP AG Executive Board

Contents

The Advantages of the R/3 System Release 3.0

R/3, the global leader in standard business software, defines new levels of performance in Release 3.0. Find out for yourself about the advantages offered by these cross-industry solutions for use in future-oriented client/server environments:

■ R/3 optimizes the core processes of your company with its integrated applications, accelerates transactions with its Business Workflow, and makes strategic management information available in transparent form at all levels of the company within the framework of its Open Information Warehouse concept.

■ R/3, with its multiple platform support and openness in its communications, assures strategic freedom in designing your information management concepts. It has been enhanced by the new ALE concept for the consistent storage and controlled exchange of business data between two physically separated application systems.

■ The R/3 System can be implemented globally. Thanks to its availability in multiple languages and country-specific versions, R/3 fulfills the requirements for use in your subsidiaries around the world. The common data format promotes clear understanding.

■ R/3 offers ready-made solutions for several hundred business processes; solutions that you – with the support of SAP modeling tools – can use to optimize the processes in your company.

The benefits: with its business-oriented functions, R/3 opens up new opportunities for improving your companies market and customer orientation. The high level of flexibility offered b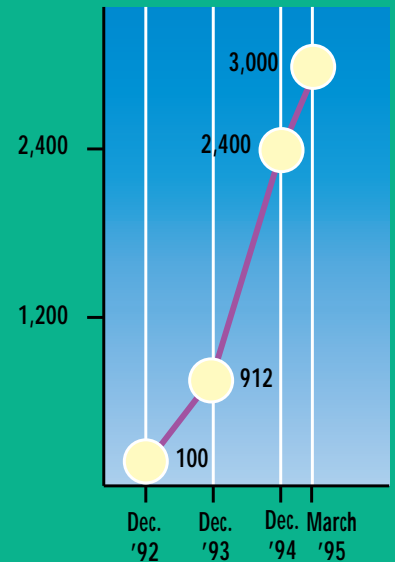y the system meets the new requirements presented by a continually changing market situation: R/3 can be quickly and easily adapted to these changes.

R/3 Installations

3,000
2,400
1,200
912
100

Dec. '92   Dec. '93   Dec. '94   March '95

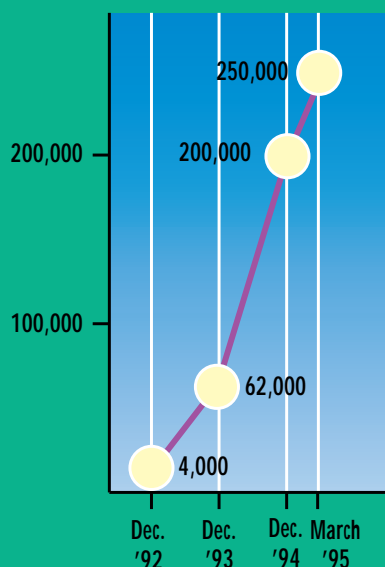## More than 200,000 R/3 Users: The World's Number One

The R/3 development project began in 1988. Just four years later the system was ready for the market. And now, in 1995, there are already over 200,000 workstations around the world running R/3 applications.

This is evidence of a market success made possible by the trust of companies of all sizes and from all industries. Our customers include leading high-tech firms from the electronics industry, multinational consumer goods manufacturers, and globally operating chemical corporations who use R/3 to reorganize their operations and restructure their logistics processes. Vendors and customers are increasingly being integrated in efficient logistics chains, and R/3 is setting new standards for "virtual supply chain management." Each day the number of companies using the R/3 System to reengineer their business processes grows. These companies are taking advantage of the variety of business processes predefined in R/3. And R/3's success is by no means limited to large enterprises; several hundred mid-sized companies are also leveraging of the gains in productivity made possible by the system.
Now that Release 3.0 of the R/3 System has – as planned – surpassed the functionality of the R/2 System, migration has become an even more attractive option for an increasing number of R/2 users. SAP provides the appropriate tools to ensure the process run smoothly.
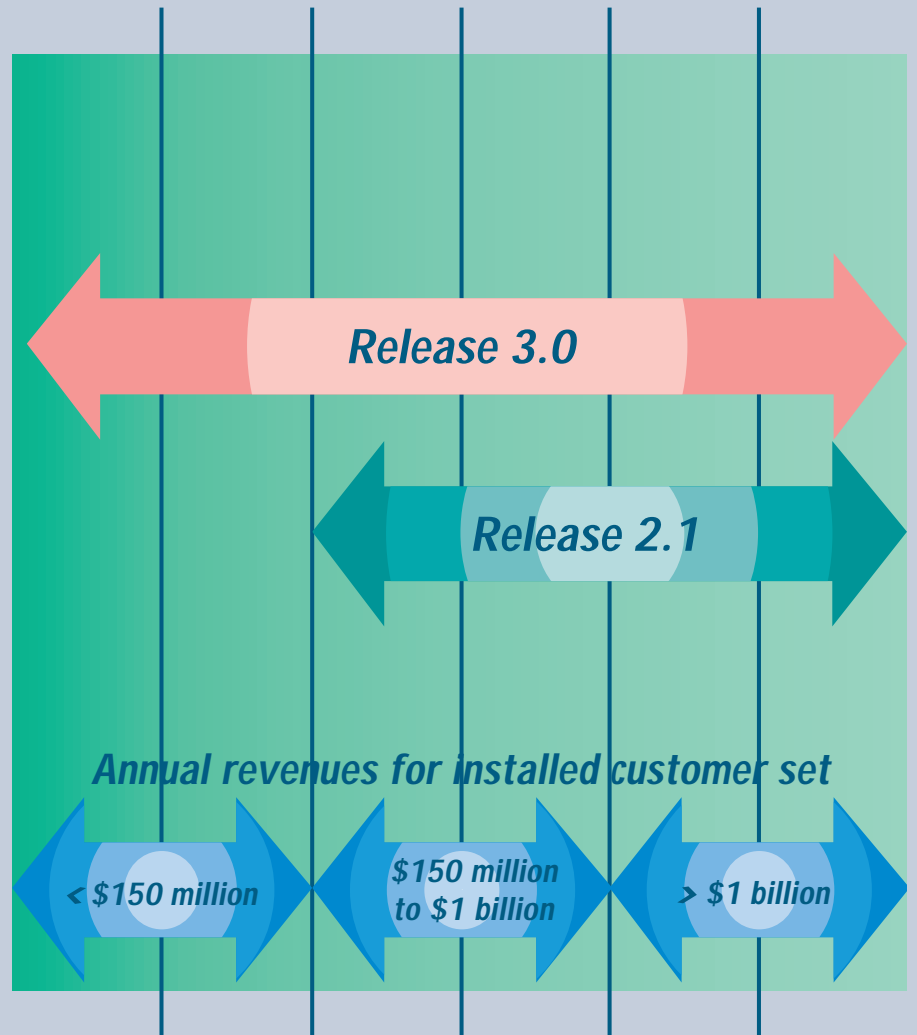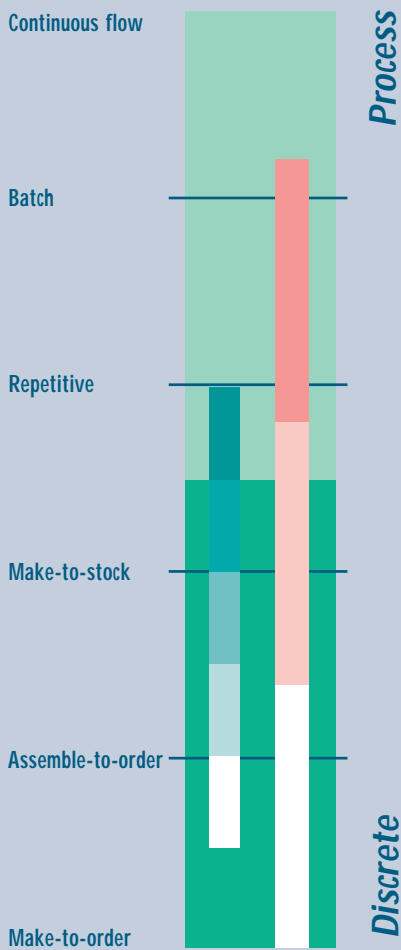
R/3 Users

250,000
200,000
200,000
100,000
62,000
4,000

Dec. '92   Dec. '93   Dec. '94   March '95

3

APPLICATIONS

Human Resources Management

Financials

Logistics

Production Types

Continuous flow

Batch

Repetitive

Make-to-stock

Assemble-to-order

Make-to-order

Process

Discrete

Release 3.0

Release 2.1

Annual revenues for installed customer set

< $150 million

$150 million to $1 billion

> $1 billion

Single plant, small company

Multiple facilities, small company

Multiple facilities, medium-sized company

Multiple facilities, large company

Division-wide, large company

Enterprise-wide, large company

Release 2.1 (based on Gartner Group, May '94)

Release 3.0

4

Logistics: Full Coverage

What logically belongs together is logistically connected. Sales and distribution, materials management, production, quality management, plant maintenance, and project management are integrated by the R/3 System into flexible, universal process chains. Powerful workflows improve efficiency and customer orientation.

In Release 3.0, SAP has further enhanced the logistics components, expanding the logistics area into a complete solution for all types of production. Whether your concern is discrete manufacturing or batch-oriented process manufacturing, or make-to-stock, make-to-order, or variant production, the R/3 System Release 3.0 offers a complete and integrated solution. A solution that ranges from intelligent order processing, production planning and production up to powerful information and early warning systems.

The variety of configurable interfaces, used by certified software products for mobile data entry, CAD, PDC, and warehous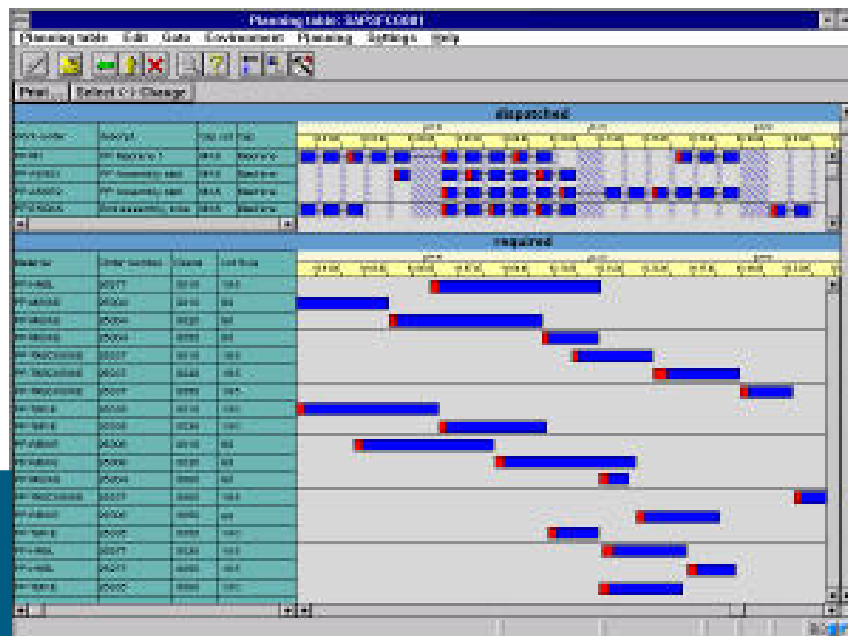e control to communicate with the logistics applications, transforms the R/3 System into an open solution that integrates all areas of a company.

Find out about the functionality of Release 3.0 for yourself: for example, the R/3 production solution for the process industry, the new Service Management module, and the handling of variants from sales through production. Repetitive manufacturing, electronic Kanban, control station functions at all levels, and plant maintenance based on counter readings are just a few of the applications we'd like to discuss with you.

APPLICATIONS

**Graphical planning table
for shop-floor control**

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ALE

ALE

PRODUCTION

- Local SOP
- PPC
- Local Purchasing
- Inventory Management

HEADQUARTERS

- Reference System for Master Data and Control Tables
- Financial Accounting
- Information Systems: Inventory - Purchasing - Sales
- Central SOP
- Central Purchasing

ALE

SALES

- Sales
- Shipping
- Inventory Management
- Billing
- Purchasing of Commodities

Distributed Applications: Linked with ALE

Communication between technically independent applications is a demanding challenge that SAP has met with the Application Link Enabling concept (ALE).

This innovative technology enables communication between distributed application systems; for example, systems operating independently in a company's head office and in decentralized locations — as shown in this scenario:

- An R/3 System at the main office serves as reference system for master data and control data throughout the company. It is used for company-wide applications.

- In the local sales offices, the R/3 System assumes the handling of incoming orders, shipping, and billing.

- The production plants use R/3 for such applications as decentralized sales and production planning, production activity control, and materials management.

Between these distributed application systems, a configurable routing model controls the exchange of business messages, changes to master data, and comparisons of control information.

The major advantages are as follows:

- Based on predefined routing models and the corresponding openness of the SAP integration interfaces, applications can be implemented and operated in decentralized form.

- Release upgrading is simplified by decoupling. This means that users can upgrade their PP system to a new release, irrespective of the status of the other systems.

- The detached application systems avoid potential bottlenecks associated with processing large quantities of data.

- Satellite solutions that, for example, link an R/2 financial accounting system with an R/3 shipping system, enable smooth transition from R/2 to R/3.

Find out for yourself about how the ALE concept can help you consistently store and easily exchange business information in distributed systems.

Financials: Comprehensive

Accounting, controlling, and treasury: an integrated approach that makes the R/3 Financials modules the management instrument for all of a company's departments.

Financials Highlights in 3.0

Accounting:
- Enhanced payment processing
- Workflow integration
- Business area consolidation

Controlling:
- Activity-based cost management
- Product cost controlling for process manufacturing, schedule-related production, order-related production, and made-to-order production
- Reconciled profitability analysis based on accounts
- Profit center accounting and management consolidation

Treasury:
- Commitment accounting
- Loans, securities, financial innovations, foreign exchange dealings, and money markets

Investment management:
- Integrated management of financial assets

Links to the supply chain from the procurement market to the sales market make it possible to optimize operational processes. The integration of strategic alliances with customers, vendors, and financial institutions increases the efficiency of such solutions.

The R/3 Financials modules can be used in:

- Companies of all sizes: from multinational groups to mid-sized operations
- Industrial operations, retail companies, financial service companies, and the public sector
- All industrialized nations.

One of the most important enhancements in Release 3.0 is Activity-Based Costing (CO-ABC). It expands conventional cost accounting with additional functions and contributes to optimizing business processes. The functions of Cash Management and Treasury Management have been enhanced. A new Investment Management (IM) module includes functions that cover the entire capital investment process, from the planning phase to settlement. Of special interest to accounting departments in large corporations is the new module Coexistence of Distributed General Ledgers (FI-GL). It allows implementation of various SAP applications on

different platforms, so large companies can integrate data from several SAP accounting systems into a centralized general ledger at the head office.
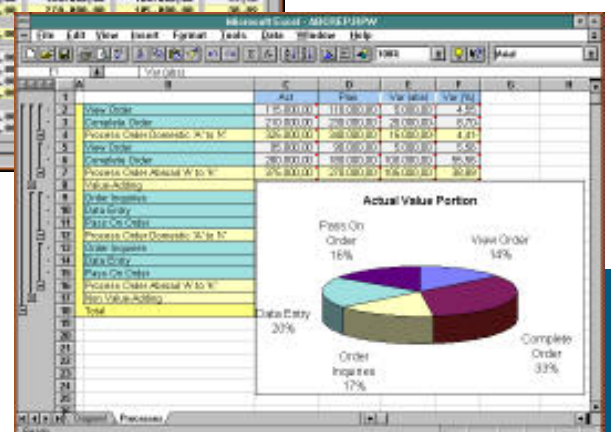
The functionality of R/3 Financials has been extended in Release 3.0 with the addition of new modules. Workflow integration for process automation is of particular benefit in accounting, since it creates the basis for the fast exchange of data and information throughout the company.

APPLICATIONS

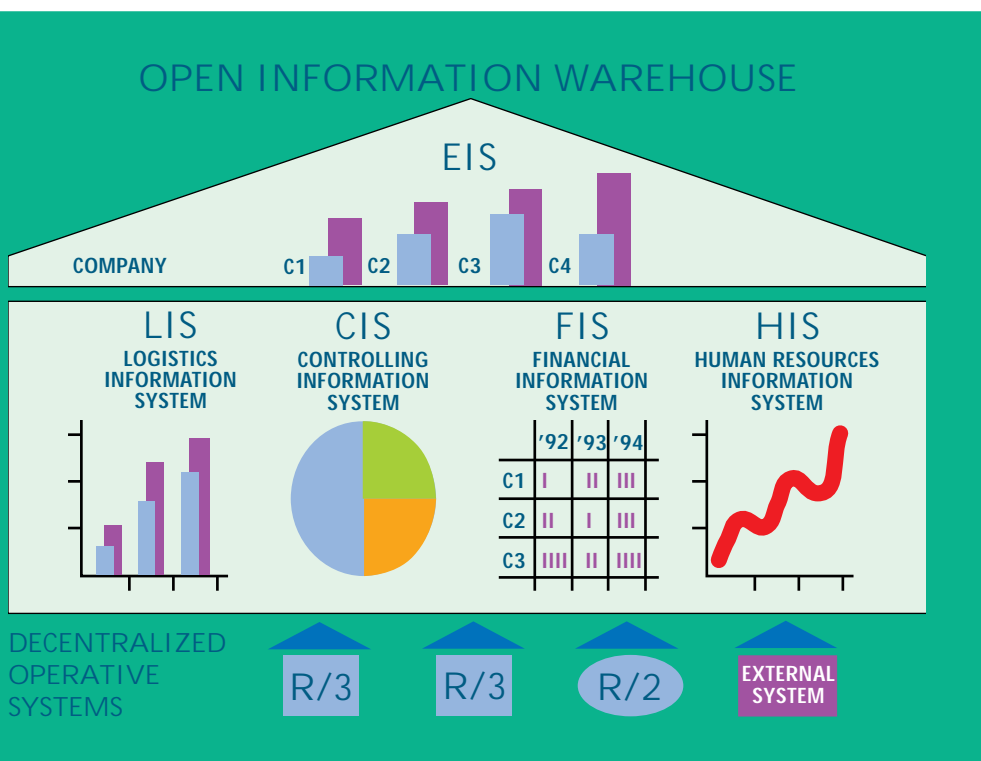**New controlling functionality with SAP Activity-Based Costing (CO-ABC)**

Open Information Warehouse: Intelligent

The SAP information systems assure intelligent, efficient monitoring and control of critical success factors at your company. They are all based on the SAP Open Information Warehouse.

The Open Information Warehouse collects data from both SAP applications and external systems and tailors it to meet the specific requirements of production and controlling staff and of company management. This results in new opportunities for decentralized "self-controlling" at user department level. SAP has implemented this logical enhancement to core controlling functions in its Logistics Information System (LIS) for sales, purchasing, production, plant maintenance, and quality management; in the Financial Information System (FIS) for customers and vendors; and in the Human Resources Information System (HIS).

Retaining a clear central overview is not always easy when distributing controlling tasks to smaller areas of responsibility. SAP's Executive Information System (EIS) lets you easily link information about critical success factors from different organizational areas and from external sources (e.g. market data), even if this data originates from different systems in different locations (R/3, R/2, non-SAP applications, etc.).

OPEN INFORMATION WAREHOUSE

RELEASE 3.0

Open Information Warehouse Highlights in 3.0

- Flexible reporting and analysis tools

- Uniformly automated information flow between the transaction, operative, and strategic information systems

- Integration of data from external applications

- Decentralized self-controlling integrated with centralized enterprise controlling

- R/2 connection to the R/3 Open Information Warehouse

Human Resources Management: Integral

The SAP Human Resources Management System enables integrated processing of all personnel-related tasks by companies and administrative units, from the organizational chart and staffing schedules, applicant data administration and applicant screening, to time valuation and payroll accounting.

Workforce planning determines a company's demand for labor based on capacity requirements from the production schedule. An education and training program based on the specific requirements of the work centers and tasks is part of integrated quality management. Workflow management across all departmental boundaries improves overall economic efficiency.
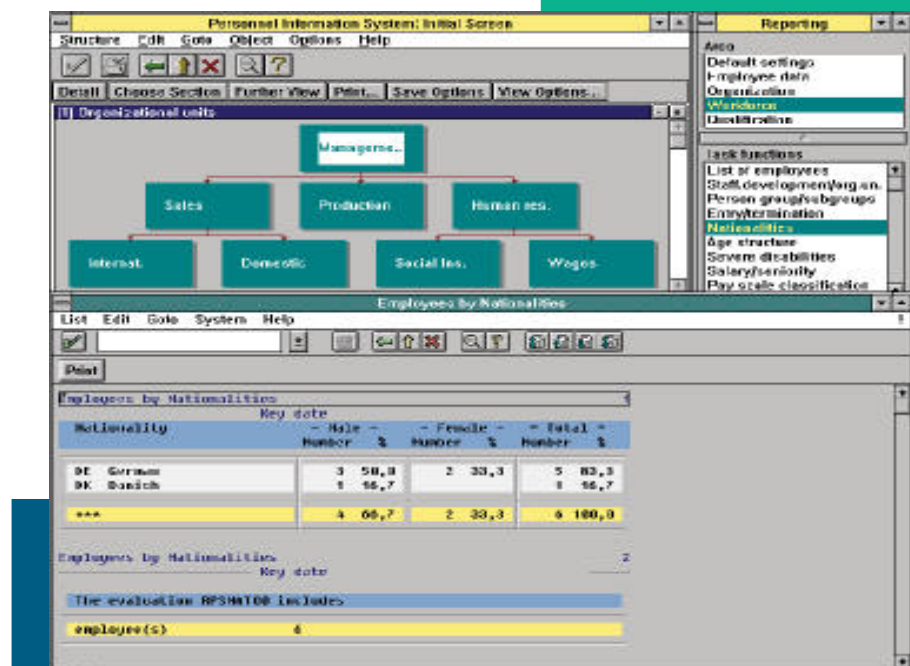
Take advantage of the extended integration of time management with accounting and logistics. Time management data can be entered with all the important cost accounting allocation concepts and updated asynchronously in cost accounting.

Companies in Germany, Spain, and Switzerland are already using the complete SAP Human Resources Management System. SAP, in cooperation with local partners on site, has now developed additional country-specific versions. The complete functionality for calculating gross and net salaries is available in Release 3.0 for the UK, France, Belgium, and the Netherlands. The US version also contains functionality for administering and settling benefits. The Japanese version includes master data administration, and payroll will follow in the second half of 1995.

Find out for yourself about the comprehensive functionality of SAP's Human Resources Management System.

Human Resources Management Highlights in 3.0

- Workforce planning, work schedule planning, shift scheduling
- Applicant data administration and applicant screening
- Seminar and convention management
- Plant data collection
- Further internationalization
- Optical archiving of human resources data
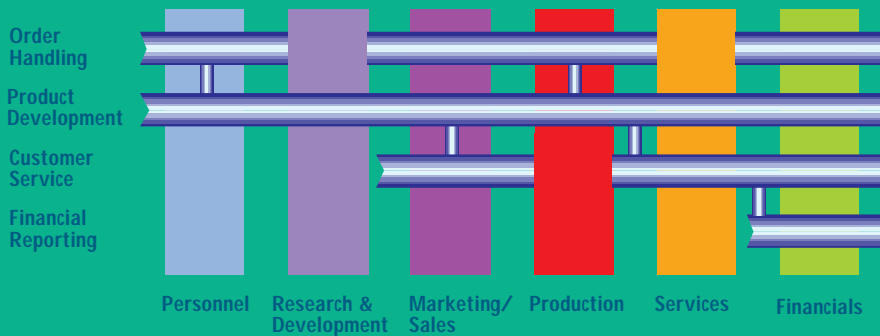- Civil Service modules completed

Employee list according to nationality

Industry Solutions: Targeted

The R/3 System can be used in any number of industries. To meet the requirements of specific economic sectors, SAP is developing industry-specific enhancements to the R/3 standard. Industry solutions for banks, insurance companies, publishers, hospitals, retailers, public utilities, the oil industry, and the public sector are either already on the market or are under development.

- Banks: risk management, statutory reporting, controlling
- Insurance companies: securities, loans and real estate
- Publishers: subscription management, advertisement management
- Hospitals: patient administration and accounting, hospital controlling
- Retail: product structure, distribution logistics, point-of-sales systems
- Utilities: device management, house connections, meter readings processing, billing
- Oil industry: exploration, transport, distribution
- Public sector: financial budget planning and management

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Business Processes

Order
Handling

Product
Development

Customer
Service

Financial
Reporting

Personnel Research & Marketing/ Production Services Financials
Development Sales

Breakdown by Functions

Customizing:
Built In

When it comes to systematically installing and adapting R/3 to your specific company needs, the R/3 customizing tools, which have been considerably enhanced in Release 3.0, help you achieve this objective. The new Procedure Model ensures transparent management of the implementation process. You can organize global or local implementations on the basis of customizing projects. Project-specific views from the Implementation Guide (IMG) reduce the configuration activities required to a minimum. You can determine the relevant functions using business processes. The next step is described in your own specific IMG, so you can make your own necessary settings. Graphic elements in the IMG and in the customized transactions make implementation clear and easy. And that's not all: the automatic recording of customized settings greatly simplifies production startup.

Business Processes: Integrated

Business processes are linked. The R/3 System integrates all activities related to a process in workflows, replacing conventional work structures with a cross-functional approach.

The SAP Reference Model is the basis for the simple and efficient representation of business processes with R/3. The Reference Model applies the methods of Event-Controlled Process Chains (EPCs) to clearly represent the functionality and scope of the software. The SAP Business Navigator contains complete descriptions of the data and process models offered by SAP. In the initial stage, you can use the R/3 reference processes to compare your business areas with the solutions offered by SAP on a general level. Data and process models allow you to look at different views of business flows in the R/3 System, and the models make it easier for you to get an overview of the variants and possible combinations of the more than 850 predefined business processes. The integration of the reference models in the R/3 Repository gives customers the security of knowing that the models offered can all be processed with the R/3 System. The support of the easy-to-use Business Navigator lets you imme-

diately analyze your own business processes, get to know the design variants offered by the R/3 System, and make an informed decision for your company.

R/3

Dynamic User Interface: Flexible

SAP continually integrates the latest innovations in ergonomic design engineering into the SAP-GUI, bringing you such advantages as company-specific screen design and optimized access to information. In the R/3 Release 3.0 Graphical User Interface, the system will automatically display, in a compact arrangement, only those fields that your company actually needs. If this adaptation of the standard version doesn't meet your needs, you can

customize the user interface in many applications to fit the specific business process of your company. Simply select and arrange the field groups you require. New interactive elements in Release 3.0 increase the flexibility of the R/3 System for the user. For example, size-adjustable header and multiarea views are displayed on one screen during processing of a standard order.

Desktop Integration: With OLE

With the inclusion of the Microsoft OLE 2.0 (Object Linking and Embedding) standard, SAP has achieved a significantly higher degree of interoperability between R/3 applications and PC software packages.

R/3 applications seamlessly utilize the functionality of PC-based solutions for word processing and spreadsheet calculation. PC programs use the data and rules from the R/3 System in a way that is transparent to the user. SAP promotes the integration of desktop applications in the R/3 System by actively including Microsoft programs and by providing standardized interfaces for linking solutions from third parties.
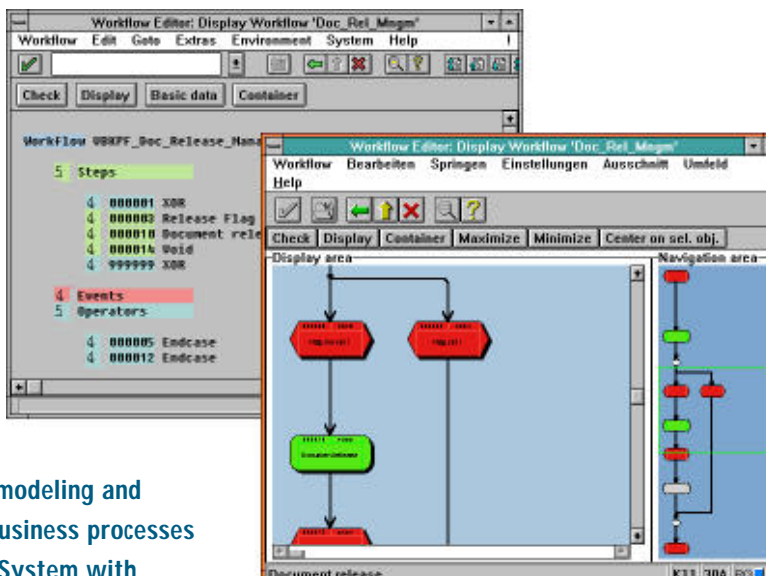
SAP Business Workflow: Dynamic

With SAP Business Workflow, business processes are automated across all application and organizational areas and are supported by an active information flow.

SAP Business Workflow acts as middleware technology, taking on additional service functions for the R/3 System applications. Workflow management therefore enhances the wide range of capabilities offered by R/3 for managing and controlling integrated transaction and communication processes. SAP delivers predefined workflow samples for practical use, but customer-specific workflows can also be designed to integrate R/3 applications as well as other software solutions and mail systems.

Workflow management and desktop integration greatly increase the areas in which the R/3 System can be used, and create new possibilities for integrating data and functions on screen.

RELEASE 3.0

Integrated modeling and control of business processes in the R/3 System with SAP Business Workflow

ABAP/4 Development Workbench: Professional Development Tools in a Stand-alone Package

The ABAP/4 Development Workbench is the leading development environment for company-wide client/server applications. With the ABAP/4 Development Workbench, customer-specific developments can be carried out with ease. New synergies are possible because of uniform, forward-compatible enhancements to the standard R/3 applications.

The ABAP/4 Development Workbench can be used for customer-specific development independent of the standard R/3 applications. A separate Basis system for stand-alone operation is now available in Release 3.0 for customers who want to use their Workbench exclusively for in-house development. Applications developed with the ABAP/4 Development Workbench on the separate Basis system can be integrated with the R/3 production Basis system via RFC, or migrated completely to the production system.
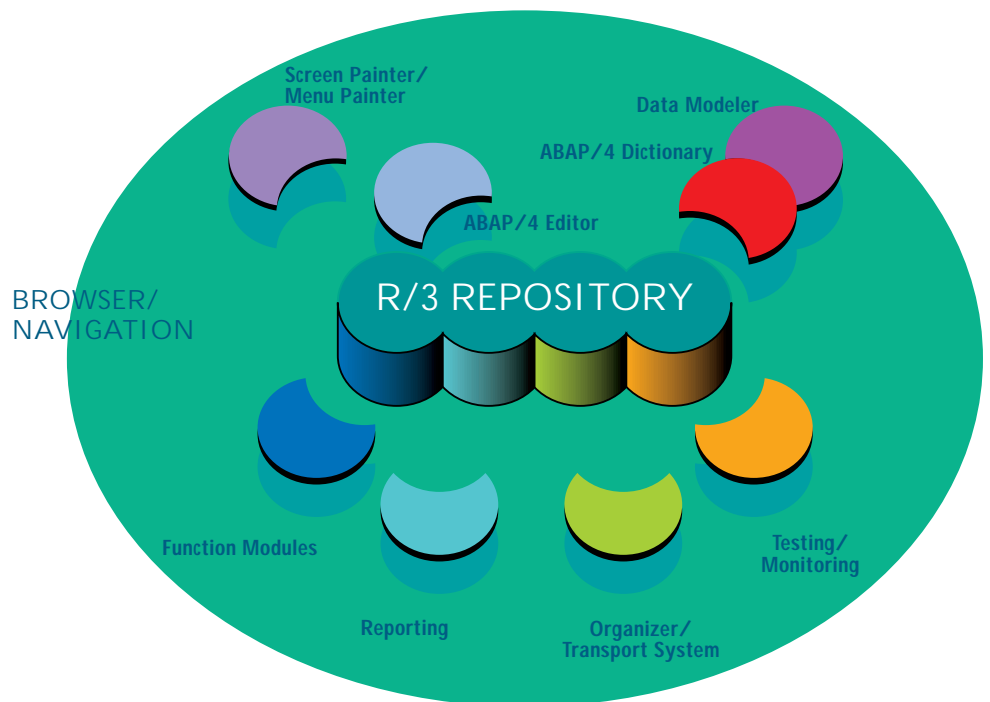
The ABAP/4 Development Workbench takes advantage of R/3 Basis technology, such as scalability, distribution, and system management. Important features include:

- Ease of use
- Repository-based development
- Non-platform-specific programming
- Repeated use of ABAP/4 modules
- Open RFC, SQL, and OLE interfaces
- Powerful tools for testing, tuning, debugging, and optimizing performance.

Screen Painter/ Menu Painter

Data Modeler

ABAP/4 Dictionary

ABAP/4 Editor

BROWSER/ NAVIGATION

R/3 REPOSITORY

Function Modules

Testing/ Monitoring

Reporting

Organizer/ Transport System

Develop client/server applications as SAP does:
Effectiveness of the ABAP/4 Development Workbench was well established during the development of R/3. Development Workbench is now being used by over 10,000 developers worldwide to

create enhancements and customized applications in the R/3 environment. In increasing numbers, SAP customers are also taking advantage of the quality and performance of the Workbench in R/3-independent development projects.

R/3 RELEASE 3.0

With the specially tailored tools of the ABAP/4 Development Workbench, SAP is offering a product line which fulfills all the requirements for developing high-end applications. The performance and capabilities are increased further in Release 3.0 with the addition of numerous new functions.

ABAP/4 Development Workbench Highlights in 3.0

- ▶ Stand-alone Basis system for in-house developments
- ▶ User-defined data types
- ▶ Screen Painter for Windows NT/Windows '95
- ▶ Asynchronous communications links with RFC
- ▶ OLE 2.0 as additional program-to-program function

- ▶ Simplified database analyses
- ▶ Simplified dictionary maintenance
- ▶ Integration of the Data Modeler
- ▶ Repository information system
- ▶ Open Repository interface
- ▶ Enhancements to the SAP-GUI
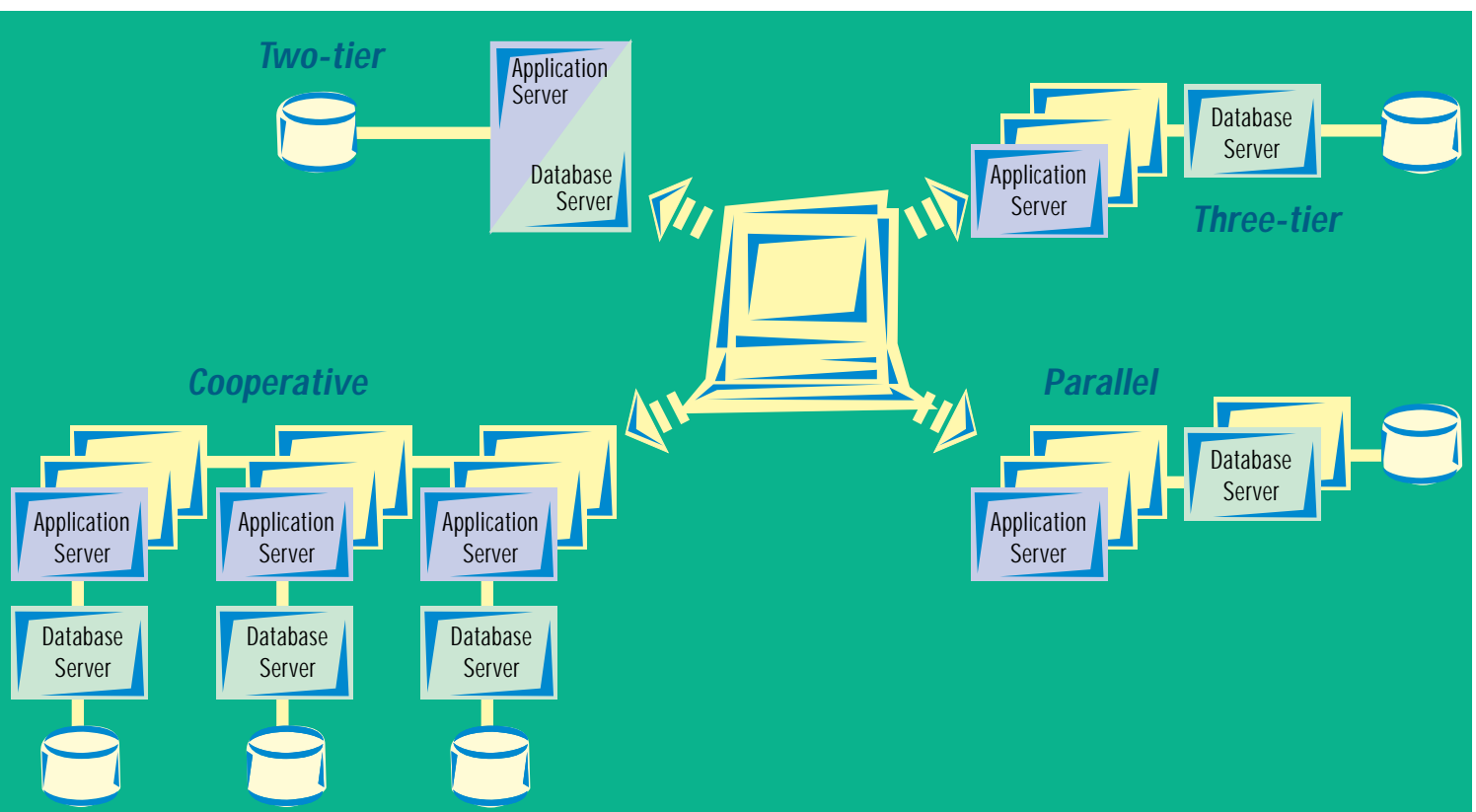- ▶ Computer Aided Test Tools (CATT)

The R/3 Infrastructure Technology: Distribution and Interoperability

The SAP infrastructure technology is a powerful basis for the R/3 applications and the ABAP/4 Development Workbench. It enables a virtually unrestricted distribution of applications and databases, as well as unprecedented integration of in-house and external software components.
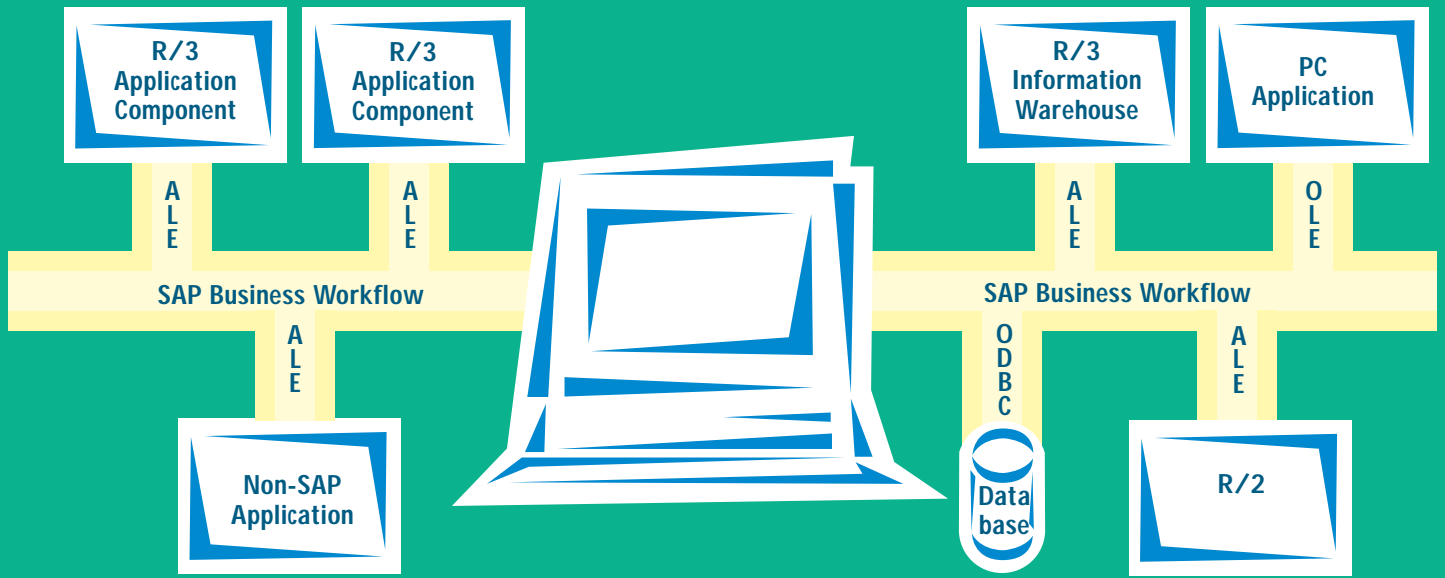
Distributed processing with R/3:

SAP customers make different demands on R/3 application systems. R/3 technology meets these requirements with flexible concepts:

- ■ The cost-efficient implementation of R/3 on a centralized or two-tier client/server system is the ideal solution for small and mid-sized installations.

Distributed processing with R/3

R/3 Application Component	R/3 Application Component				R/3 Information Warehouse	PC Application

ALE · ALE · SAP Business Workflow · ALE · Non-SAP Application · ODBC · Database · ALE · OLE · SAP Business Workflow · ALE · R/2

- Mid-sized and large installations require high throughput performance but must remain manageable. In such cases we recommend the three-tier client/server implementation.
- Very large installations do not simply demand powerful systems. They also require a very high level of system availability. The use of parallel database servers in a three-tier client/server architecture is considered to be the optimum solution.
- Groupwide and worldwide installations have the greatest need for performance and availability. Many other requirements also have to be considered, such as the integration of existing structures and the necessity of geographical distribution. The ideal solution is provided by cooperative client/server computing with distributed applications.

R/3 infrastructure technology meets the diverse real-world needs with different options for distributing applications. All the basic forms of distributed processing can, of course, also be combined to fit your needs.

Integration and openness

Business processes do not end at the borders of computers or applications. The R/3 infrastructure technology provides a software bus to guarantee the complete implementation of business processes. It handles message-based integration for almost any number of application components. This ensures that different applications work together instead of against each other.

- Messages are exchanged between applications via the Application Link Enabling concept (ALE). This technology controls the communication between R/3 subsystems, R/2 and R/3 applications, and, of course, between non-SAP systems and R/3.
- SAP uses OLE technology (Object Linking and Embedding) from Microsoft and the ODBC standard (Open Database Connectivity) to link PC components with R/3.
- SAP Business Workflow controls the individual processing steps executed in the application components.

Standard system view

The many possibilities for distributing applications and for the cooperative use of different application systems results in a standard system view for the customer, who no longer has to deal with the problem of different systems on different computers.

Continuous operation guaranteed

SAP makes it as simple as possible for the user to control and monitor R/3. Powerful Computing Center Management System (CCMS) tools monitor production operation, deliver current data about system status and resource usage, and recognize problem situations before they become serious.

And when it's time to upgrade the system, the new Repository Switch ensures the fast and simple transition from one version to the next. The switch procedure reduces the time your production system is down during an upgrade to just a few hours.

The R/3 infrastructure technology leaves SAP customers free to manage their businesses instead of worrying about their system software.

R/3 RELEASE 3.0

SAP R/3 Services:
Dedicated To Customer Satisfaction

SAP is continually expanding the level of its services through the use of future-oriented technology. One of SAP's main objectives is to ensure that its powerful services are available around the world 24 hours a day.

Your future security is our goal. So we provide you with powerful services at every phase of R/3 implementation to ensure that you make optimum use of your R/3 System. The emphasis of our SAP R/3 service commitment is on problem prevention, information tailored to customer needs, and fast and uncomplicated consulting through video-supported technology. Problem-solving and forwarding of inquiries are accomplished via our Online Service System. Advanced workflow technology automates escala-

tion procedures and increases the efficiency of our service processes. All complemented by extensive customer experience in meeting the needs and expectations of customers. In fact we obtain ideas for the continual further development of our services through our active cooperation with customers. Customers are our central focus, and since no two customers are the same, we tailor our service to fit each customer's individual needs.

24-hour support worldwide

The SAP R/3 service commitment means targeted services for each phase of the R/3 System life cycle:

- Problem-solving services for the quick resolution of system-related problems
- Remote support services for error prevention, system optimization, and consulting
- Information Services providing current information tailored to customer needs
- Customer support services as a central contact point for receiving and answering questions about the R/3 System and R/3 Services
- Product design services for integrating development requests in future production functionality
- Certification and audit service to ensure a uniform quality standard for services from SAP and its partners
- EarlyWatch service for increased system availability through preventive analyses that assure early recognition and avoidance of problems

We supplement our own services with services from partners. The quality of our services and those of our partners is monitored, certified, and optimized at regular intervals to ensure a constant high level. We would be happy to send you information on SAP products and services. Please call (610) 521-4500 or fax (610) 521-6290.

Central to communication with SAP customers is the online remote connection to the R/3 Services and the services of our partners. The Online Service System (OSS) offers a Hot News service, assures fast and easy information retrieval, and makes ordering documents easy.