SAP R/3

From Wikipedia, the free encyclopedia

SAP R/3 is the former name of the enterprise resource planning software produced by the German corporation SAP AG (now SAP SE). It is an enterprise-wide information system designed to coordinate all the resources, information, and activities needed to complete business processes such as order fulfillment, billing, human resource management, and production planning.[1]

The current successor software to SAP R/3 is known as SAP ERP.

Contents

[hide]

History of SAP R/3[edit]

Earlier versions[edit]

The first version of SAP's flagship enterprise software was a financial accounting system named R/1. This was replaced by R/2 at the end of the 1970s. SAP R/2 was a mainframe-based business application software suite that was very successful in the 1980s and early 1990s. It was particularly popular with large multinational European companies who required soft-real-time business applications, with built-in multi-currency and multi-language capabilities.

R/3[edit]

With the advent of distributed [client–server](#) computing SAP AG brought out a client–server version of the software called SAP R/3 (the "R" was for "Real-time data processing" and "3" was for "[3-tier](#)": 1) database, 2) application server, and 3) client (SAPgui)). This new architecture is compatible with multiple platforms and operating systems, such as [Microsoft Windows](#) or [UNIX](#). This opened up SAP to a whole new customer base.

SAP R/3 was officially launched on 6 July 1992. Various releases of the software were made through the 90s.

A newer version of the software, with new architecture, was released in 2003–2004, renamed as [SAP ERP](#). ECC is a version name for SAP ERP,(ERP Central Component). Other SAP Implementations can be customized products can function on the central component. SAP came to dominate the large business applications market over the next 10 years.[citation needed] SAP ECC 5.0 ERP is the successor of SAP R/3 4.70. The newest version of the suite is SAP ERP 6.0, Enhancement Pack 7.

Releases[[edit](#)]

- SAP R/1, System RF: 1972
- SAP R/2, ran on a mainframe architecture: 1979
- SAP R/3 Enterprise Edition 1.0 A: July 1992
- SAP R/3 Enterprise Edition 2.0: 1993
- SAP R/3 Enterprise Edition 3.0: 1995
- SAP R/3 Enterprise Edition 4.0 B: June 1998
- SAP R/3 Enterprise Edition 4.3
- SAP R/3 Enterprise Edition 4.5 B: March 1999
- SAP R/3 Enterprise Edition 4.6 C: April 2001
- SAP R/3 Enterprise Edition 4.6 F
- SAP R/3 Enterprise Release 4.70: March–December 2003[2]
- SAP R/3 Enterprise Edition 4.7
- SAP R/3 Enterprise Central Component (ECC) 5.0: 2004
- SAP R/3 Enterprise Central Component (ECC) 6.0: October 2005 – June 2006
- SAP **ERP** 6.0: Enhancement Packages (1, 2, 3, 4, 5, 6, 7)
- SAP S/4 HANA

Software organization[[edit](#)]

SAP R/3 was arranged into distinct functional modules, covering the typical functions in a business organization. The most widely used modules were [Financials and Controlling (FICO)](#), [Human Resources (HR)](#), [Materials Management (MM)](#), [Sales & Distribution (SD)](#), and [Production Planning (PP)](#).[citation needed]

Each module handled specific business tasks on its own, but was linked to the other modules where applicable. For instance, an invoice from the billing transaction of Sales

& Distribution would pass through to accounting, where it will appear in accounts receivable and cost of goods sold.

SAP typically focused on best practice methodologies for driving its software processes, but more recently expanded into vertical markets. In these situations, SAP produced specialized modules (referred to as IS or Industry Specific) geared toward a particular market segment, such as utilities or retail.

Technology[edit]

SAP based the architecture of R/3 on a three-tier client/server structure:

1. Presentation Layer (GUI)
2. Application Layer
3. Database Layer

Presentation Layer[edit]

SAP allows the IT supported processing of a multitude of tasks which occur in a typical company. The newer SAP ERP software differs from R/3 mainly because it is based on SAP NetWeaver: core components can be implemented in ABAP and in Java and new functional areas are mostly no longer created as part of the previous ERP system, with closely interconnected constituents, but as self-contained components or even systems.

Application Server[edit]

This server contains the SAP applications. In systems with two layers, this server forms part of the database server. Application server can be set up for online users, for background processing, or for both.

An application server is a collection of executables that collectively interpret the ABAP/4 (Advanced Business Application Programming / 4th Generation) programs and manage the input and output for them. When an application server is started, these executables all start at the same time. When an application server is stopped, they all shut down together. The number of processes that start up when you bring up the application server is defined in a single configuration file called the application server profile. Each application server has a profile that specifies its characteristics when it starts up and while it is running. For example, an application server profile specifies:

- Number of processes and their types
- Amount of memory each process may use
- Length of time a user is inactive before being automatically logged off.

The Application layer consists of one or more application servers and a message server. Each application server contains a set of services used to run the R/3 system. Not practical, only one application server is needed to run an R/3 system. But in practice, the

services are distributed across more than one application server. This means that not all application servers will provide the full range of services. The message server is responsible for communication between the application servers. It passes requests from one application server to another within the system. It also contains information about application server groups and the current load balancing within them. It uses this information to choose an appropriate server when a user logs onto the system.

The application server exists to interpret ABAP/4 programs, and they only run there. If an ABAP/4 program requests information from the database, the application server will send the request to the database server.

Security[edit]

Server-to-server communications can be encrypted with the SAP cryptographic library.[3] With the recent acquisition of relevant parts of SECUDE,[4] SAP can now provide cryptography libraries with SAP R/3 for Secure Network Communications and Secure Socket.

See also[edit]

- NetWeaver
- SAP ERP
- T-code

References[edit]

1. **Jump up ^** Esteves, J., and Pastor, J., "Enterprise Resource Planning Systems Research: An Annotated Bibliography", *Communications of AIS*, 7(8): 2–54.
2. **Jump up ^** *"Difference bet. ECC 6.0 & SAP R/3 4.7"*. *Itknowledgeexchange.techtarget.com. 2012-06-01. Retrieved 2012-09-12.*
3. **Jump up ^** SAP Cryptographic Library (SAPCRYPTOLIB
4. **Jump up ^** SAP to Acquire Software Security Products and Assets from SECUDE

External links[edit]

Android applications:

- FREE TFIN SAP FI Questions for Android
- FREE TAW12 SAP ABAP Questions for Android
- FREE TSCM SAP SD Questions for Android
- Free SAP T codes research tool

Retrieved from
"https://en.wikipedia.org/w/index.php?title=SAP_R/3&oldid=704213124"

[Categories](#):

- [SAP AG](#)
- [ERP software](#)

Hidden categories:

- [All articles with unsourced statements](#)
- [Articles with unsourced statements from February 2014](#)
- [Articles with unsourced statements from August 2009](#)

Navigation menu

Personal tools

- Not logged in
- [Talk](#)
- [Contributions](#)
- [Create account](#)
- [Log in](#)

Namespaces

- [Article](#)
- [Talk](#)

Variants

Views

- [Read](#)
- [Edit](#)
- [View history](#)

More

Search

Go

Navigation

- [Main page](#)
- [Contents](#)

Interaction

Tools

Print/export

Languages

- Privacy policy
- About Wikipedia
- Disclaimers
- Contact Wikipedia
- Developers
- Cookie statement
- Mobile view