

Oracle8 - The Database Server for SAP R/3

The database server - a critical success factor

The Oracle® data server is by far the most widely used database for running SAP R/3. A majority of R/3 customers entrust their data to an Oracle database. The fact that more than ten thousand successful R/3 systems have been implemented on Oracle worldwide, and that Oracle supports all SAP-supported Unix and NT platforms, attests to the success of the relationship between these two market leaders.

The role of the database system in the SAP R/3 environment

Within the three-tier R/3 architecture model, the database plays a very important role. Poor stability, performance or technological potential of the database have a direct influence on the entire R/3 system.

As the R/3 application system forms the backbone of the entire company for many SAP customers, it is important that the systems components function properly. Faulty or inadequately functioning components have direct effects on business operation. This applies without restriction to small and medium R/3 configurations, and especially to the large and largest R/3 installations on NT and Unix.

The need for high reliability is especially true of the database component within the R/3 architecture.

A database must offer excellent performance and high reliability to support a customer's critical business application.

Oracle and R/3

Oracle and SAP have cultivated a strong development relationship for more than 10 years.

Since the R/3 project began in 1988, Oracle has been the most important development database for R/3.

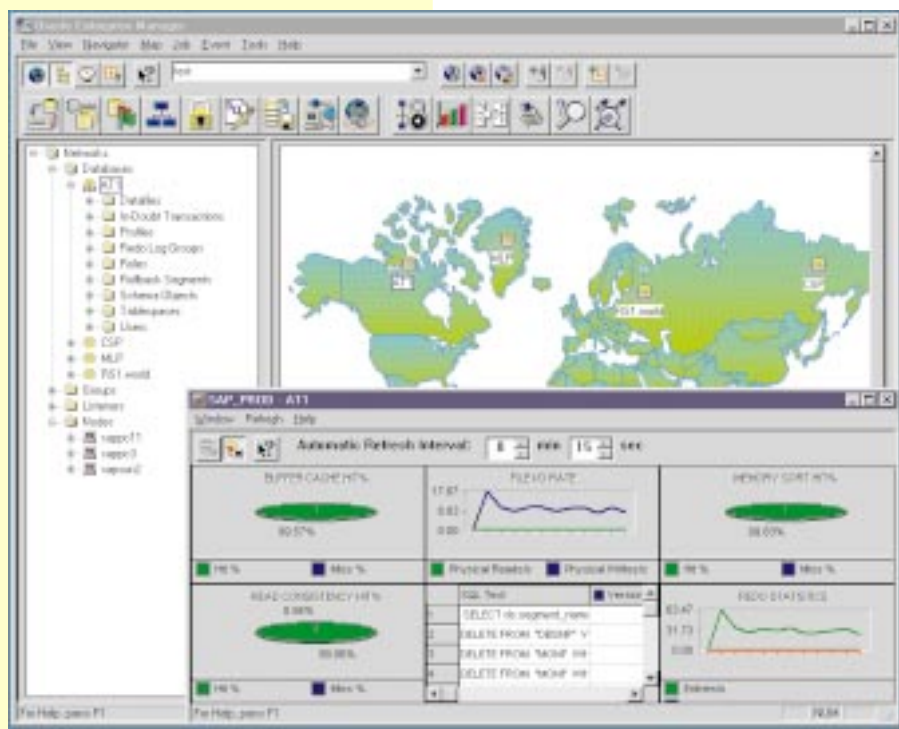
The Oracle data server, like no other database system in the R/3 environment, offers:

- the greatest possible availability
- the greatest possible scalability
- the best performance
- simple administration

all of which are important to the successful operation of a company's critical business applications.

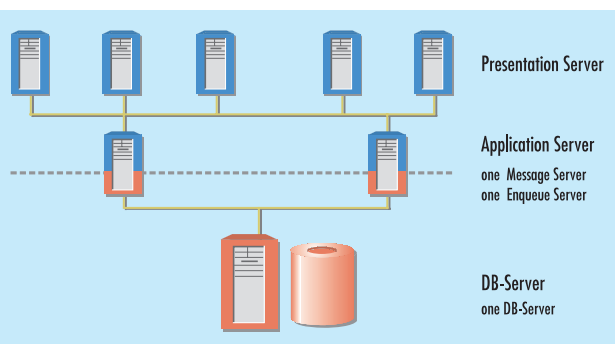
High availability is important for planned and unplanned interruptions in the operation of the database and consequently the R/3 system. Planned interruptions are reduced to the absolute minimum with Oracle and thus can always be combined with other planned interruptions. Almost all administration tasks are possible online. Regularly reorganization of database or tables are not necessary. To be able to maintain uninterrupted R/3 operation even when there is an unplanned failure of the database server, a number of options are available:

- Oracle Parallel Server (OPS) for high availability (OPS HA)
- Hardware switch-over (service of the hardware supplier)



- Oracle Fail Safe for NT (switch-over based on Microsoft Cluster Server)
- Oracle standby for a remote alternate computer center

All the above mentioned high availability options are available in conjunction with R/3 and are widely used in practice.



Performance and scalability

Oracle is without a doubt the most scalable database system on the market. No other database system in the R/3 environment is available with identical capabilities to support systems ranging from NT laptops to Unix high-end SMP systems with up to 64 CPUs and a SAP SD-benchmark bandwidth of 5 to more than 6000 SD users. Oracle leads the performance hit list for SAP R/3 by a wide margin.

Parallelization of database operations is one of the key technologies for the operation of large OLTP and data warehouse applications. The Oracle Parallel Query technology is used extensively on all operational levels of R/3 on Oracle systems. Without modification of the data structure and ABAP/4 code, it is possible for several processors to carry out SQL commands or administrative functions such as backup or recovery in parallel, thus permitting enormous time savings in the execution of operations.

SAP R/3 on Oracle8

Oracle8, the new object-relational database system release, has already been extensively tested in the beta phase by the SAP development team, and is available now for R/3 versions 3.0, 3.1 and 4.0+. A large number of technological

innovations directly benefit the system as a whole, without requiring any change in the data structure or the R/3 programs. The initial benefits are in the areas of improved performance and administration. Other important relational Oracle8 functions such as new backup/recovery methods with incremental backup, parallel DML operations or index-organized tables will be integrated incrementally into the R/3 on Oracle8 product set.

Oracle8 for your R/3 success

Using Oracle8 for your R/3 introduction enables your success. SAP R/3 is based on extremely reliable Oracle database technologies that were introduced many years ago and are

unique in form and makeup. These include:

- Unlimited data record locks
- Consistent read operations without locking
- Shared SQL cache for high-performance dynamic SQL
- Statistical SQL optimizer
- Parallel online backup and recovery
- Point-in-time recovery
- Parallel SQL execution

With Oracle7 Release 7.3 and Oracle8, additional Oracle functions for higher performance and simpler administration were introduced:

- Bit-mapped indexes
- Hash joins
- New star query method for data warehouse applications
- Parallel DML
- Optional partitioning of tables and/or indexes
- „Autoextend“ for database files
- Unlimited number of extents
- Index recreate on the basis of an existing index

to name but a few.

Oracle Consulting Services for SAP R/3 Customers

Oracle offers extensive R/3 database services for all SAP customers. The expertise available has developed through day-to-day work with R/3 systems at SAP, and it ensures that you receive the best possible support for smooth operation of your R/3 System.

Consulting services are available for, but not limited to:

- Setup and operation concepts
- Backup/restore/recovery concepts
- Performance analysis and tuning
- Oracle Parallel Server
- Integration with existing systems
- Migration

Platforms Supported

All R/3 UNIX Systems including cluster and MPP systems.

All R/3 NT Systems.

Interested ?

Then call or write to us at:

Oracle/SAP COMPETENCE CENTER



Max-Planck-Straße 8
D-69190 Walldorf
Tel. (+49/62 27) 7- 4 45 33
Fax (+49/62 27) 7- 4 32 40
<http://www.sap.com>
e-mail: orasap_cc@de.oracle.com

ORACLE®

Oracle Headquarters

Oracle Corporation
500 Oracle Parkway
Redwood Shores, CA 94065, U.S.A.
Phone: +1.650.506.7000
Fax: +1.650.506.7200
<http://www.oracle.com>
<http://solutions.oracle.com>

SAP Headquarters

SAP AG • Postfach 1461 • 69185 Walldorf
Deutschland • Tel.: (+49/180) 5 34 34 24
Fax: (+49/180) 5 34 34 20 • <http://www.sap.com>