

Central Master Routing Database (zMRDB).

Technical information.



Server architecture/connection.

The zMRDB application has been implemented in a 3-layer model (illustration 1):

- Communication layer between the clients and the following operational level
- Process layer for the depiction of the business logic
- Data level

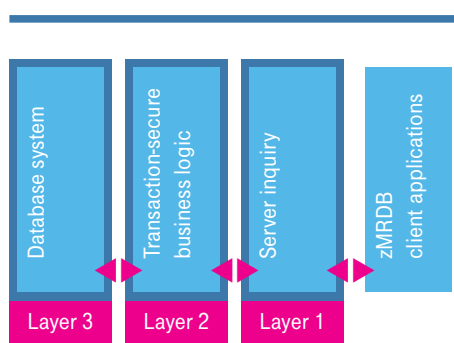


Illustration 1

As part of the communication layer, an inquiry server will receive inquiries of zMRDB clients. The inquiry server is externally represented as a proxy, i.e., it maintains the communication connection between the zMRDB and the zMRDB clients and fully shields the area behind the server from the clients. This enables it to function both as a uniform interface and as system security. The server is implemented by way of a Java Servlet.

The business logic depicts the business processes in its own transaction-secure environment. All write access to the database is implemented in a transaction. Any changes that have been made only become final after the database results have been successfully transferred. Each business process has its own functions that can be called up repeatedly at the same time via the application server. These functions transfer requests to the database and/or modify the data. The business logic functions are implemented in Enterprise Java Beans (EJB).

Porting information is stored at the data level by way of a database server. A second, redundant system is available for each software component. This set-up ensures that if a system were to fail, a parallel system will take over.

The following software components are used:

- HTTP server
- Application server/Servlet engine
- Application server/EJB server
- Database system

As a J2EE-compatible application, the entire system is based on the following products:

- BEA WebLogic Express, HTTP server, Servlet engine
- BEA WebLogic server, application server, EJB server
- Oracle database system

Client.

An MNP master routing database connector is required. This conveys XML messages via the protocols HTTP or HTTPS and forms the interface to the central database.

In the case of "(connection) problems" in live operation, the **T-Systems help desk** is available to zMRDB users 24 hours a day, 7 days a week. The contact information for this can be found in chapter 4 of the zMRDB user contract.