



TABEX4 ACCESS SYSTEM

TABEX4

TABEX4 is the leading cross-platform standard software for table access and maintenance. Highest performance and convenient data maintenance make TABEX4 an optimal tool for efficient and revision-proof table management.

WORLD'S FASTEST TABLE ACCESS

Benefit from TABEX4 technology, which enables the world's fastest table access and a system-wide, centrally controlled status of table data.

This offers you the following advantages.

1. Reduced access time to table data from user interface, user programs and batch programs
2. Reduced I/O load
3. Reduced CPU consumption
4. Reduced programming effort for application programs

With TABEX4 our customers can achieve a lot of savings: According to z/OS measurements, CPU consumption was on average reduced to one tenth and in some cases to 2% compared to a DB2 direct access.

1 Reduced access time - saving CPU time

Tables can be loaded into the common data space (IBM zSeries mainframe, z/OS) or into shared memory areas (Linux, Unix).

Access time to the data is reduced by using tables in the main memory and subsequently reduced I/O operations. Expensive mainframe CPU performance can thus be efficiently saved.

The TABEX4 system architecture, in which the business logic runs on the TABEX4 server and not on the client, results in considerable performance advantages:

- Optimized access from user interface, application programs or batch programs
- Simultaneous access to the tables from any number of processes
- Optimized display of table data in the browser. Only data that is required for the display is transferred to the client

Optimized TABEX4 access interfaces are available for all higher programming languages such as Java, C/C++, COBOL, PL/1 etc., as well as for IBM mainframe assembler and TABEX's own language SSL.

2 Reduced I/O load

Data replication is integrated in TABEX4 and enables high-performance local table access even in distributed architectures.

This reduces the I/O load on the computer that provides the affected database. The network load is reduced because data is stored locally and does not have to be transported by the network.

3 Reduced programming effort for application programs

TABEX4 provides programmers with powerful and intuitive functions for working with TABEX4. These can make application development much easier.

TABEX4 allows outsourcing of :

- any potentially variable data, such as e.g. time-dependent constants, and
- the program logic, e.g. decision tables

into TABEX tables.

This variable data is accessed at almost the same speed as data defined as constants in programs.

PERFORMANCE COMPARISON DB2 - TABEX4 BY A BOI CUSTOMER

TABEX4 stands for the world's fastest table access and highest performance. What do we mean by „the world's fastest table access“? A performance comparison of DB2® and TABEX4 was made in order to support this statement with figures and thus make it transparent for you.

The following measurement of the access performance of DB2® and TABEX4 was carried out in 2014 by one of our customers.

Customer situation:

- TABEX4 table accesses are used in batch programs and online programs.
- Individual tables are accessed more than 1 billion times a day.
- On peak days, approx. 250 tables are accessed more than 100 million times.

Test situation:

- 10 million DB2 calls
- 10 million TABEX4 calls
- DB2 version 10 and TABEX4 version 4.3.0 were used.
- Accesses were performed from a PL/1 program in batch mode (mainframe).
- The key consisted of 2 fields with a total length of 7 bytes.
- Accesses were made to a table with 250 rows.

Results:

- DB2 took 27 seconds.
- **TABEX4 took 1 second!**

TABEX4 achieves this excellent result through

- the use of a machine-oriented programming language,
- preloading the tables into main memory areas,
- minimum number of physical I/O operations (i.e. file accesses),
- Shortest possible access paths
- extensive storage and subsequent reuse of information already obtained

