



TABEX4 SYSTEM ARCHITECTURE

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.

TABEX4 SYSTEM ARCHITECTURE

TABEX4 uses the following components:

1. Browser
2. Web application
3. Business logic
4. Data sources (RDB, TABEX databases)

How the components are connected with each other is shown in Figure 1.

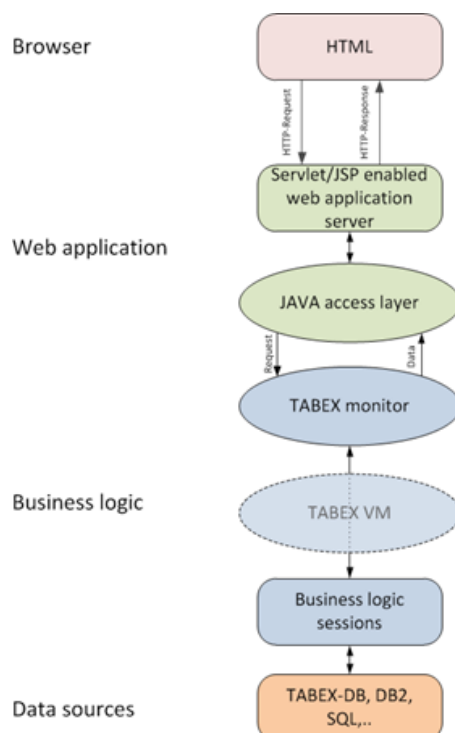


Figure 1: TABEX4 components and communication workflow.

TABEX4 COMMUNICATION WORKFLOW

1 Browser

TABEX4 is accessed via web application using a browser. The browser communicates with the web application using HTTP or HTTPS.

2 Web Application

The web application is responsible for the layout and the representation of the data. It manages the display of function menus as explorer trees and shows tool bars to select icons.

The user can login by entering user name and password or by using single sign-on (SSO).

The web application communicates with the business logic using TABEX4 JAVA ACCESS and TCP/IP.

3 Business Logic

The business logic executes tasks such as loading table data from various data sources, checking input data, processing user input, and saving of changes.

The TABEX monitor receives the login of users. For each user, the monitor establishes an own session – the business logic sessions. If required, each user may open and work with multiple sessions. The business logic is executed in each session of the TABEX monitor separately, independent of other sessions.

The business logic manages connections to data sources of different types.

For TABEX4 installations on Solaris, Windows, AIX or Linux, there is a virtual machine between the TABEX monitor and the business logic sessions – the TABEX VM. It converts native mainframe CPU instructions to native CPU instructions of the operation system.

4 Data Sources

TABEX4 can process data from various data sources, such as relational databases or TABEX databases.

The following data sources are supported:

- TABEX database
- Relational databases
 - DB2
 - Oracle
 - MySQL
 - PostgreSQL
 - MS SQL
 - Informix
 - Progress
- Import/Export of
 - VSAM
 - Sequential files
 - xls, xlsx, csv

TABEX4 – INDEPENDENT OF PLATFORMS AND DATABASES

TABEX4 is independent of platforms and databases, see Figure 2. Within heterogeneous IT systems, TABEX4 offers the advantage of being a standardized system. This is achieved by the system architecture, the TABEX4-specific programming language SSL and the TABEX VM.

The web application can be run on commonly used application servers. Browser, web application, business logic and the data sources can be run distributed and on different platforms.

TABEX4 DATA SECURITY

TABEX4 guarantees highest data security. All data resides on the server. Only those data is transported to the browser, which is actually required for the current data maintenance.

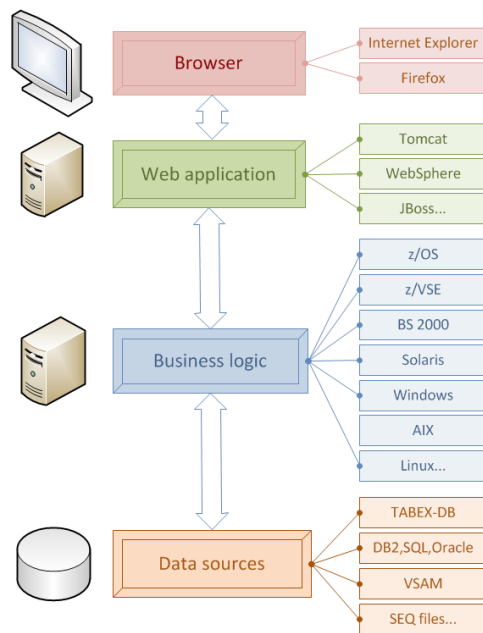
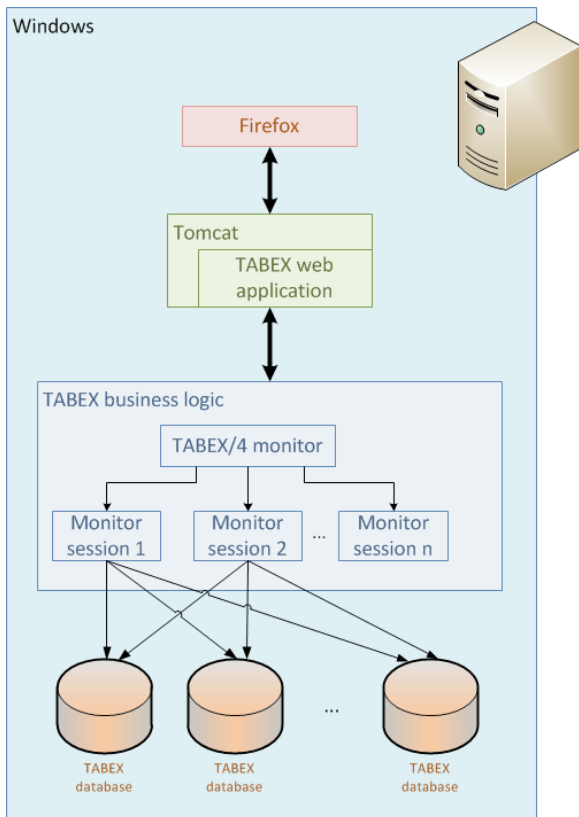
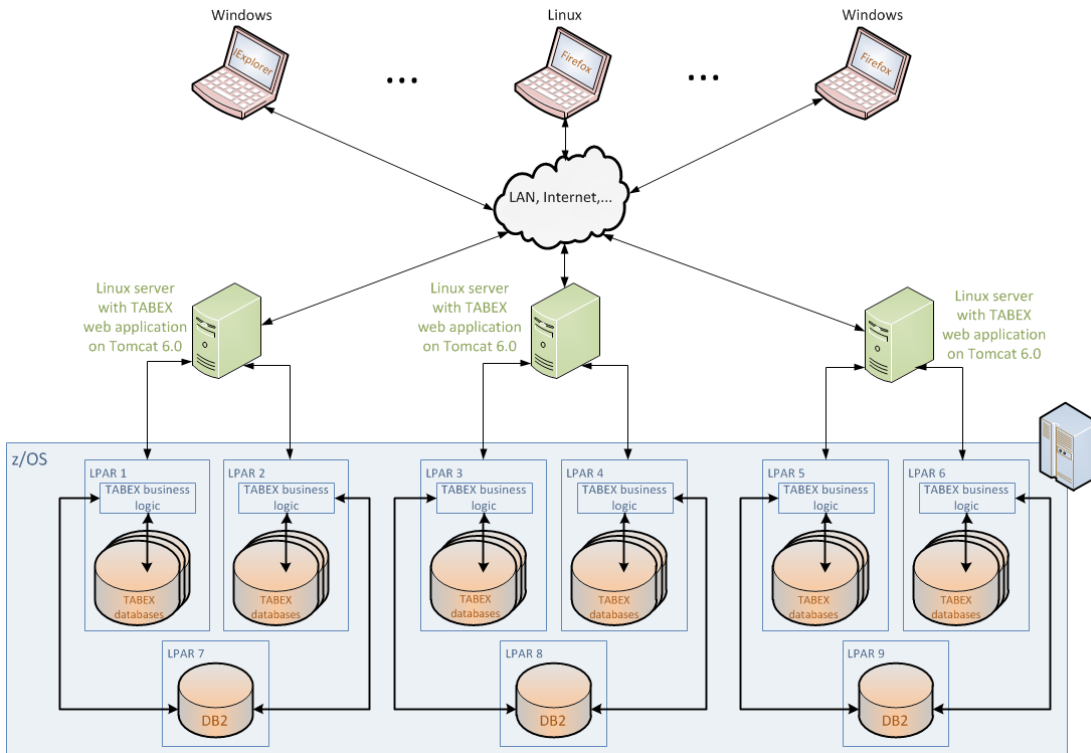


Figure 2: TABEX4 - independent of platforms and databases.

TABEX4 INSTALLATIONS: TWO EXAMPLES

The following figures show two possible variants of a TABEX4 installation:



Example 1 (above): Distributed Installation

Example 2 (on the left): Installation on a stand-alone Windows computer

