



## BOI FreeDa

Audit-proof data management  
for relational databases

### Product overview

Confidentiality level: public  
Date: 22.04.2024

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## BOI FreeDa: The excellent solution for audit-proof data management for relational databases

*„Our key accounts held the knowledge about our customers, thus they should be able to maintain data on our internal processes and customer relevant information such as terms, conditions or promotional discounts. Unfortunately, due to their lack of IT knowledge, it is not guaranteed they can do so without risking errors in the database.“*

*„We have established workflows in MS Excel that are cumbersome and error-prone. We urgently need processes that are role- and user-controlled and, above all, audit-proof!“*

Do you face these challenges as well? The operative experts are not database specialists and therefore the audit-proof maintenance of important company data is not guaranteed?

Use the knowledge and expertise of your employees in the operative departments for the maintenance of data in relational databases. BOI FreeDa offers a uniform maintenance and administration interface for data management with state-of-the-art usability and innovative maintenance workflows.

By simply transferring Excel Data into a relation database using BOI FreeDa, you provide employees without any database knowledge the easy access to all relevant data in order to maintain these data securely and independently.

### With BOI FreeDa the maintenance of your table data is...

- **user friendly:**  
Intuitive and easy maintenance of critical master and control data, optimized for users without database knowledge
- **secure:**  
Effective securing of data maintenance through fine-granular rules, authorizations and verifications
- **verifiable:**  
Audit-proof workflows for data maintenance with complete logging of all data changes

## How does BOI FreeDa stand out?

### BOI FreeDa enables users without database knowledge to maintain critical data

The technical knowledge about your company is in the operating departments but due to the lack of database expertise they can not maintain data themselves. BOI FreeDa offers an intuitive and simple solution for the managed and audit-proof maintenance of data for the most common relational databases. The data maintenance proceeds exclusively in the BOI FreeDa system and the changes are only activated in your database after the maintenance process has been completed.

### BOI FreeDa is independent

BOI FreeDa is independent of operating systems and database neutral. Due to that, BOI FreeDa can be used for the table maintenance of diverse databases like Db2, Oracle, Microsoft SQL Server, MySQL, PostgreSQL, Informix and MariaDB. The connection is done via JDBC (Java Database Connectivity). BOI FreeDa uses only SQL statements for data import and export.

### BOI FreeDa frees relational databases

BOI FreeDa offers different standard workflows for audit-proof maintenance: without control, with self-control (2 eyes) or 4- and 6-eyes principle. The maintenance workflows are defined in BOI FreeDa and not in the database. That means that during the data maintenance, all changes are stored exclusively in BOI FreeDa and there is no intervention in the data management, the data model and the productive use in the relational database. The BOI FreeDa data maintenance takes place independently of the database's constraints, but BOI FreeDa ensures that all constraints are strictly observed when activating data changes.

### BOI FreeDa facilitates different maintenance processes

In BOI FreeDa, the administrator defines central aspects of the data maintenance and keeps control which tables are maintained directly or assigned to the 2-, 4- or 6-eyes-principle. BOI FreeDa guides users through the selected maintenance process and ensures that the defined maintenance process is always followed.

### BOI FreeDa guarantees security

With roles and permissions, the administrator defines the rights of the users. This way, only the right persons can read, edit, control or release tables. BOI FreeDa automatically ensures that all changes are database compliant. You can additionally define logical checks for tables, such as parent-child relationships, value ranges, etc.

### BOI FreeDa maintains tables individually or in a package

In BOI FreeDa, the administrator can maintain entire tables, parts of tables and packages comprising several different tables according to the requirements of your company. Use - also cross-database - packages to ensure the simultaneous activation of changes of technically related tables.

## BOI FreeDa supports bi-temporal data formats

With BOI FreeDa, bi-temporal data with a validity period can be maintained easily.

## BOI FreeDa replaces the process of unstructured MS Excel data maintenance

Nowadays, data maintenance by the operating department is often carried out using products such as MS Excel. This leads to unstructured, time-consuming and error-prone processes. Replace these with the efficient BOI FreeDa maintenance processes.

## BOI FreeDa is compatible with Enterprise Resource Planning Systems

BOI FreeDa can be used together with ERP systems. This allows for instance the realization of maintenance processes outside the ERP system which leads to cost savings as customer specific adaptations of your ERP are no longer needed.

## BOI FreeDa meets individual requirements

You need additional functions which are not included in the standard product?

Our development team implements additional customized functions by BOI FreeDa scripts.

## Data maintenance with BOI FreeDa: TableNAVI

Table name	Schema	Database	Package name	Maintenanc...	Maintenanc...	Status set	Lock	Locked	MANDANT
(10) biten	(3) boifre								
BITEMPINC	FRETEST	ZOSDB2	-	→					
BITEMPVIS	FRETEST	ZOSDB2	-	→					
cities	boifre	postgres	-	→		TESTUSER1			
cities	public	postgres	Auftrag1	→					
continents	boifre	postgres	-	→	✓	ADMIN			
continents	public	postgres	Auftrag1	→					
kunden	boifre	postgres	-	→		ADMIN		ADMIN	
ripostcode	public	postgres	-	→					
states	boifre	postgres	-	→					
states	public	postgres	-	→					
vertrag	boifre	postgres	-	→					
vertrag	public	postgres	-	→					

Figure 1 : TableNavi with the clear representation of all tables for which the user is authorized.

## Data maintenance with BOI FreeDa: Table editing

The screenshot shows the BOI FreeDa Admin User interface. The sidebar menu (1) includes 'My functions', 'NAVis', 'My edits', 'My favorites', 'My authorizations', 'Message journal', 'Own functions', 'SQL Console', 'Administration', 'My settings', and 'Control tables'. The top navigation bar (2) shows the table name '\* vertrag (boifre/postgres)'. The table (3) displays data for various contracts. The right-hand sidebar (4) contains icons for table actions. The table data is as follows:

RowNo.	vertrag_nr	kd_nr	vertragsart	vertragsbeginn	vertragsende	laufzeit	risikogruppe	dynamik	monatliche_rate
1	V0005-01	K0005	Risiko	20.10.1975	20.10.2005	30	56	N	1
2	V0005-02	K0005	Kfz	20.10.1975	20.10.2005		56	N	1
3	V0005-03	K0005	Risiko	15.03.1976	15.03.1996		34	N	
4	V0005-04	K0005	Standard	01.02.1988	01.02.2013	25	78	N	
5	V0005-05	K0005	Sport	01.02.1988	01.02.2013	25	78	N	
6	V0006-01	K0006	Risiko	01.04.1998	01.01.2020	22	10	Y	
7	V0007-01	K0007	Sport	01.01.2000	01.01.2015	15	45	N	5
8	V0008-01	K0008	Risiko	01.06.1972	01.06.2022	50	56	N	3
9	V0009-01	K0009	Kfz	15.03.1976	15.03.1996	20	34	N	
10	V0010-01	K0010	Risiko	20.10.1975	20.10.2005	30	56	N	1
11	V0014-01	K0014	Leben	15.03.1976	15.03.1996	20	34	N	
12	V0016-01	K0016	Risiko	01.01.2000	01.01.2030	30	67	N	
13	V0017-01	K0017	Standard	01.01.2000	01.01.2030	30	23	N	1
14	V0017-02	K0017	Risiko	20.10.2005	20.10.2035	30	56	N	1
15	V0017-03	K0017	Kfz	01.02.2008	01.02.2033	25	78	N	
16	V0017-04	K0017	Risiko	01.01.2000	01.01.2030	30	23	N	1

Figure 2: Data maintenance in BOI FreeDa

### 1. My functions

- Table overview
- Table edit
- Favourites
- Permissions
- Notification journal
- Own functions

### 2. Editing bar

- Import & Export
- Show in Excel
- Create Deep Link
- DML export
- Search/Replace
- Table comparison

### 3. Table status in workflow

- Active
- In process
- Waiting for control
- Waits for activation time
- Waits for activation

### 4. Table actions

- Table information
- Table maintenance process
- Table verifications
- Table permissions

### 5. Administration

- User management
- Parameter management
- ControlNavi

### 6. Checks

- Automatic format check
- Table specific check

## Data maintenance with BOI FreeDa: Table comparison

The screenshot shows the 'Table comparison' feature in BOI FreeDa. It displays two side-by-side tables: 'Old status' and 'Current status'. The 'Old status' table has columns: RowNo., kd\_nr, nach, vorname, city\_num. The 'Current status' table has the same columns. Annotations 1-4 highlight specific changes:

- 1: Row 50, kd\_nr K0061, nach Dichant, vorname Elisa, city\_num C0004 (highlighted in blue in the old status).
- 2: Row 51, kd\_nr K0062, nach Effenzweg, vorname Harald, city\_num C0024 (highlighted in blue in the old status).
- 3: Row 50, kd\_nr K0061, nach Dichant, vorname Elisa, city\_num C0055 (highlighted in blue in the current status).
- 4: Row 51, kd\_nr K0062, nach Effenzweg, vorname Harald, city\_num C0054 (highlighted in blue in the current status).

### Table comparison

Figure 3: BOI FreeDa table comparison

- 1. Table before editing
- 2. Reject change
- 3. Table after editing
- 4. Changed values are highlighted

## Data maintenance with BOI FreeDa: Table log

The screenshot shows the 'Table logs' interface for the table 'postgres.public.continents'. It includes settings for 'Type of log' (Maintenance log selected), 'Time period' (Entire time period selected), and 'Consider archive' (unchecked). Below the settings is a table with columns: User, Action, Time, Maintenance. Annotations 1-4 highlight specific elements:

- 1: Maintenance log radio button.
- 2: Export to Excel icon.
- 3: Filter settings for User, Action, Time, and Maintenance.
- 4: Maintenance reason column in the log table.

### Table log

Figure 4: BOI FreeDa table log

- 1. Selection of maintenance or activation protocol
- 2. Display in Excel, compare table states
- 3. Logged Data: user, action, time, maintenance reason
- 4. Filter settings: user, action, time, reason for change

## BOI FreeDa products

BOI FreeDa is available in three editions:

- **BOI FreeDa direct** offers direct maintenance of tables, all changes are immediately activated in the database.
- **BOI FreeDa Table Edition** also offers the option of table maintenance processes, thus separating data storage in the database from data processing for the duration of the entire maintenance process. It also offers table checks and the connection to external systems. Customer-specific functions can be implemented via BOI FreeDa scripts.
- The **BOI FreeDa Workflow Edition** offers additionally the implementation of individual maintenance workflows and support for bi-temporal database formats, multi-client capability and the maintenance of sub-tables and orders.

	BOI FreeDa	BOI FreeDa Table	BOI FreeDa Workflow
<b>One interface for the most common RDB</b> <ul style="list-style-type: none"> <li>• Db2, Oracle, Microsoft SQL Server, MySQL, PostgreSQL, Informix and MariaDB via JDBC</li> </ul>	✓	✓	✓
<b>Intuitive table editing</b> <ul style="list-style-type: none"> <li>• Table editor incl. comprehensive maintenance and import/export-functions</li> </ul>	✓	✓	✓
<b>Editing unit</b> <ul style="list-style-type: none"> <li>• Entire tables</li> <li>• Parts of tables and table packages</li> </ul>	✓	✓	✓ ✓
<b>Editing process</b> <ul style="list-style-type: none"> <li>• NoCheck (direct editing)</li> <li>• SelfCheck, SingleCheck, DoubleCheck</li> <li>• Individual maintenance workflows</li> </ul>	✓	✓ ✓	✓ ✓ ✓
<b>Checks</b> <ul style="list-style-type: none"> <li>• Automatic BOI FreeDa checks</li> <li>• Customized table checks</li> </ul>	✓	✓ ✓	✓ ✓
<b>Connection to customer systems</b> <ul style="list-style-type: none"> <li>• Authorization and authentication (e.g. OpenID connect)</li> </ul>		✓	✓
<b>Data organization</b> <ul style="list-style-type: none"> <li>• Multi-client capability</li> </ul>			✓
<b>Logging</b> <ul style="list-style-type: none"> <li>• Data changes and settings</li> </ul>	✓	✓	✓
<b>Scripting</b> <ul style="list-style-type: none"> <li>• Scripts for BOI FreeDa processes</li> <li>• Customized maintenance scripts</li> <li>• Customized menu functions</li> </ul>	✓	✓ ✓	✓ ✓ ✓
<b>Parent-Child</b> <ul style="list-style-type: none"> <li>• Parent-child connections</li> </ul>			✓
<b>Temporal data formats</b> <ul style="list-style-type: none"> <li>• Support of bi-temporal data formats</li> </ul>			✓
<b>BOI FreeDa Add-Ons</b> <ul style="list-style-type: none"> <li>• BOI FreeDa Staging</li> <li>• BOI FreeDa SQL Console</li> </ul>		✓ ✓	✓ ✓

## BOI – FOR YOUR BETTER ORGANIZED INFORMATION

### Convincing Quality

Efficient and audit-proof.  
High-performance and ultra-fast.  
Company-wide use for all  
databases and operating systems.

### Efficient Service

Over 45 years of experience.  
Excellent, dedicated team.  
One-stop consulting, technology  
and implementation.

### BOI - We set an example.

Our vision is a society in which  
economic management goes hand  
in hand with social commitment and  
ecological action.

Our mission is to make the best  
possible contribution to ensuring  
sustainable development on an  
economic, social and ecological level.

We want to operate in a net zero  
manner from 2026 and are already taking  
numerous measures to reduce  
our greenhouse gas emissions.

We pay attention to the well-being of our  
employees and take measures to protect their  
health. We consistently donate 10% of our annual  
profit to social and environmental organizations.



BOI Software Entwicklung und Vertrieb GmbH  
Over 45 years of success and innovation.  
Your expert for data management.

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