



BOI FreeDa

Audit-proof data management
for relational databases

Product overview

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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 displays the BOI FreeDa Admin User interface. The sidebar on the left contains navigation options: My functions, NAVis, My edits, My favorites, My authorizations, Message journal, Own functions, SQL Console, Administration, My settings, and Control tables. The top menu shows the BOI logo and the text 'BETTER ORGANIZED INFORMATION'. The main area displays the table 'vertrag (boifre/postgres)' with 16 rows. The table columns are: RowNo., vertrag_nr, kd_nr, vertragsart, vertragsbeginn, vertragsende, laufzeit, risikogruppe, dynamik, and monatliche_rate. The table is filtered by 'vertragsart' and 'vertragsbeginn'. The table status in the workflow is shown as 'Active'. The user profile 'FreeDa Admin User' is visible in the top right corner.

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' (left) and 'Current status' (right). Both tables have columns: RowNo., kd_nr, nach, vorname, and city_num. The 'Old status' table shows data for rows 46 to 60. The 'Current status' table shows data for rows 46 to 60. Annotations 1-4 highlight specific changes:

- 1. Table before editing (Row 50 in Old status)
- 2. Reject change (Row 51 in Old status)
- 3. Table after editing (Row 50 in Current status)
- 4. Changed values are highlighted (Row 51 in Current status)

RowNo.	kd_nr	nach	vorname	city_num
46	K0057	Köhl	Hanelore	C0036
47	K0058	Marschi	Lukas	C0011
48	K0059	Hottler	Heinrich	C0024
49	K0060	Drohaniksky	Theodor	C0029
50	K0061	Dichant	Elisa	C0004
51	K0062	Effenzweg	Harald	C0024
52	K0063	Hooplang	Rita	C0033
53	K0064	Kalteis	Doris	C0033
54	K0065	Buchinger	Hermine	C0022
55	K0066	Wagner	Günther	C0055
56	K0067	Kocaj	Alen	C0054
57	K0068	Blümel	Gernodt	C0039
58	K0069	Krantler	Frank	C0041
59	K0070	Weber	Andreas	C0010
60	K0071	Ferch	Simon	C0008

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 in BOI FreeDa. It displays the table 'postgres.public.continents'. The 'Type of log' section has two options: 'Maintenance log' (selected) and 'Activation log'. The 'Time period' section has two options: 'Entire time period' (selected) and 'Define time period'. The 'Start date' and 'End date' fields are empty. The 'Consider archive' checkbox is unchecked. Below the settings, there is a table of log entries with columns: User, Action, Time, and Maintenance. Annotations 1-4 highlight specific elements:

- 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

User	Action	Time	Maintenance
ADMIN	waiting for check	2024-04-30_1...	
ADMIN	edited	2024-04-30_1...	

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

B0I FreeDa products

B0I FreeDa is available in three editions:

- **B0I FreeDa direct** offers direct maintenance of tables, all changes are immediately activated in the database.
- **B0I 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 B0I FreeDa scripts.
- The **B0I 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.

	B0I FreeDa	B0I FreeDa	B0I FreeDa
One interface for the most common RDB <ul style="list-style-type: none"> • Db2, Oracle, Microsoft SQL Server, MySQL, PostgreSQL, Informix and MariaDB via JDBC 	✓	✓	✓
Intuitive table editing <ul style="list-style-type: none"> • Table editor incl. comprehensive maintenance and import/export-functions 	✓	✓	✓
Editing unit <ul style="list-style-type: none"> • Entire tables • Parts of tables and table packages 	✓	✓	✓ ✓
Editing process <ul style="list-style-type: none"> • NoCheck (direct editing) • SelfCheck, SingleCheck, DoubleCheck • Individual maintenance workflows 	✓	✓ ✓	✓ ✓ ✓
Checks <ul style="list-style-type: none"> • Automatic B0I FreeDa checks • Customized table checks 	✓	✓ ✓	✓ ✓
Connection to customer systems <ul style="list-style-type: none"> • Authorization and authentication (e.g. OpenID connect) 		✓	✓
Data organization <ul style="list-style-type: none"> • Multi-client capability 			✓
Logging <ul style="list-style-type: none"> • Data changes and settings 	✓	✓	✓
Scripting <ul style="list-style-type: none"> • Scripts for B0I FreeDa processes • Customized maintenance scripts • Customized menu functions 	✓	✓ ✓	✓ ✓ ✓
Parent-Child <ul style="list-style-type: none"> • Parent-child connections 			✓
Temporal data formats <ul style="list-style-type: none"> • Support of bi-temporal data formats 			✓
B0I FreeDa Add-Ons <ul style="list-style-type: none"> • B0I FreeDa Staging • B0I FreeDa ERP Connect 		✓ ✓	✓ ✓

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 climate-neutral
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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