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# ZeosDBO Technical Info

## ZeosLib Development Group

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ZeosDBO is a database middleware components for Borland development tools, including Delphi, C++ Builder and Kylix.

The following compilers are supported:

- Delphi 5 - 7 and 9-11
- Lazarus (FreePascal)
- MSEide+MSEgui (FreePascal)
- C++ Builder 5 - 6
- Kylix 2 - 3

ZeosDBO supports direct connectivity to the following databases using the vendor provided, native interface:

- MySQL 3.20 - 5.0
- PostgreSQL 6.5 - 8.1
- Firebird 1.0 - 2.0
- Interbase 5.0 - 7.5
- Microsoft SQL Server 7, 2000
- Sybase ASE 12.0, 12.5
- Oracle 9i
- SQLite 2.8, 3.5

For other databases we propose to use implemented Active Data Objects (ADO) Bridge.

Advantages of using ZeosDBO:

- Platform independence. The ZeosDBO is highly generic. Applications written in ZeosDBO can be migrated across databases without major changes.
- ZeosDBO is open source, written for usability and extensibility.
- ZeosDBO leverages the amazing power of the Delphi development environment without relying on a performance killing middleware.
- ZeosDBO is an extremely thin abstraction layer, unlike 'thick' layered protocols like ADO and BDE.

Package contents:

1. `ZCore` - Core classes and interfaces. Contains Java style objects and collections as well as compatibility types and functions.
2. `ZParseSql` - SQL specific for syntax and lexical analysis.
3. `ZPlain` - Native plain API to supported SQL servers.
4. `ZDbc` - Port of Java Database Connectivity API (JDBC 2.0). DBC API acts as intermediate layer between Plain API and highlevel `TDataset` or `DBExpress` components
5. `ZComponent` - visual components descended from `TDataset`.
6. `ZComponentDesign` - design time components. This package is not available for all compilers. If present it's only needed to install the components in the IDE.

Installed components:

1. `TZConnection`: This component encapsulates the database connection and transaction management.
2. `TZReadOnlyQuery`: `TDataset` component to execute SQL queries and process data in read-only mode.
3. `TZQuery`: `TDataset` component which allows data modifications in regular and cached mode.
4. `TZUpdateSQL`: Analog of standard `TUpdateSQL` component to explicit definition of Insert/Update/Delete SQL statements for `TDataset` modifications.

5. `TZStoredProc`: The component to execute SQL stored procedures.
6. `TZSQLProcessor`: The component to execute SQL scripts for different SQL and various delimiter types.
7. `TZSQLMonitor`: The component to monitor all outgoing SQL queries and other logging information.
8. `TZSQLMetadata`: Specialized TDataset component which provides an access to database metadata such as tables, columns, indices, etc.

The project home page is here (for news, links and other project info): <http://zeos.firmos.at> [<http://zeosfirmos.at/portal.php>]

The sourceforge development site is located here (for technical resources and anonymous web based cvs access): <http://www.sourceforge.net/projects/zeoslib> [<http://www.sourceforge.net/projects/zeoslib>]

Thank you for using our software,

The ZeosLib Development Group