Database Explorer: Overview

The Database Explorer is a hierarchical database browser with editing capabilities as described below. Each edition of INPRISE development tools (Delphi, C++Builder, Visual dBASE) ships with a different Database Explorer:

Tool Edition	Explorer Name	Notes
Enterprise	SQL Explorer	Access local databases (dBASE, Paradox, FoxPro), local or remote databases through third-party ODBC drivers, and remote SQL databases through native SQL Links drivers. Data dictionary enabled.
Professional	Database Explorer	Access local databases and the local version of the InterBase Server.With third party ODBC drivers, permits access to ODBC-compliant databases (local and remote types), but does not support extended SQL object browsing. Data dictionary enabled.

When a feature is available in only one or two versions of the SQL/Database Explorer, it is indicated in the help topic.

Through a persistent connection to a database, the Database Explorer enables you to:

- Browse and edit database server-specific schema objects, including tables, fields, stored procedure definitions, triggers, and indexes.
- Create, view, and edit data in existing tables.
- Create and maintain database aliases.
- Enter SQL statements to query a database.
- Create and maintain data dictionaries and attribute sets (Enterprise and Professional editions only).
- Launch the BDE Administrator to configure the Borland Database Engine (BDE).

{button ,AL(`intro')} Other Database Explorer topics

The Database Explorer window

The Database Explorer window displays database information in two panes.

- The left pane is tabbed and displays a hierarchical tree of objects:
  Databases page, aliases of available databases.
  Dictionary page, imported databases, tables, and attribute sets in the data dictionary.
- The right pane contains tabbed pages that display the contents of objects highlighted in the left pane. The tabbed pages in the right pane vary depending on the type of object highlighted in the left pane. For a list, see Tabbed pages.

A plus sign (+) beside an object in the left pane indicates that the object contains other objects below it. To see those objects, click the plus sign. When an object is expanded to show its child objects, the plus sign becomes a minus sign. To hide child objects, click the minus sign. For a list of other graphic symbols in the left pane, see Color-coded symbols.

To view information about an object in the left pane, click the object. The right pane displays one or more tabbed pages of information about the object. For example, when a database alias is highlighted in the left pane, the right pane displays a Definition page that contains database Type, PATH, and DRIVER NAME parameters, or properties. Bolded parameter names indicate a parameter that cannot be modified. All other parameters that appear in the right pane can be edited there.

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Color-coded symbols

The following color-coded symbols appear to the left of objects in the left pane:

Icon	Meaning
Green box	The highlighted database is open. You can view objects in the database.
Green arrow	The object is in editing mode. There are changes in this object or in objects further down its tree that have not been applied.
Shining green arrow	The object is newly created.
Red X	This object is to be deleted. When changes to this object or its parent object are applied the object is deleted. To see this symbol, check Confirm Edits on the Options menu. Otherwise, the object will be deleted instantly without a chance to apply the deletion.

Applying edits

Edits only take effect when they are applied. To apply edits and make changes permanent:

1. Click a green arrow or shining green arrow icon at the highest level where you want edits applied.
2. Right-click and choose Apply or click the Apply button  .

Note: A red arrow indicates an error, so edits cannot be applied at that level until the error is corrected.

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Tabbed pages

The selections you make in the left pane enable some or all of the following right pane tabbed pages:

Right pane pages	Description
Definition	Displays the parameters, or properties, of the object highlighted in the left pane.
Summary	Displays the objects contained within the parent object highlighted in the left pane.
Data	Displays the data in a selected table, view, or synonym.
Enter SQL	Displays a window in which you can enter SQL statements.
Text	Displays the text required to create the selected SQL object.

You can edit parameters on the Definition page if the parameter names appear in normal type. If parameter names appear in bold, they cannot be edited.

You can enter and edit records in a table on the Data page if the table permits write access.

The tabbed pages available in the right pane differ depending on the currently selected object in the left pane.

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Menu commands

The following topics define the commands available from each menu on the Database Explorer's menu bar.

Object menu commands

Dictionary menu commands

Edit menu commands

View menu commands

Options menu commands

Help menu commands

Context menu commands (Data page)

Context menu commands (Enter SQL page)

Context menu commands (Blob Explorer)

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Object menu commands

These commands appear on the Object menu. Most of these commands are also available from the context menu that appears when you right-click with an object selected in the Database Explorer.

Object menu	Description
Open	Opens the highlighted object.
Close	Closes the highlighted object.
New	Creates a new instance of the highlighted object class.
Delete	Deletes the highlighted object.
Rename	Changes the name of an object.
Apply	Saves the highlighted object, including all changes and pending deletes to objects within its tree.
Cancel	Cancel the current operation.
Save As	Lets you specify a name for the SQL object to save.
Save Text To File	If an SQL object has a text representation on the Text page, you can save the object's text to a text file. If View|Change Text is checked, you can save the change text too.
Version Information	Displays information on installed BDE DLL and driver files.
Vendor Configuration	Launches the ODBC Administrator or appropriate vendor-supplied SQL configuration utility for the selected database.
ODBC Administrator	Launches the ODBC Administrator for configuring ODBC drivers.
BDE Administrator	Launches the BDE Administrator for configuring BDE or database drivers and aliases.
Import To Dictionary	Imports schema information from the selected object into the current dictionary.
Exit	Exits the Database Explorer.

{button ,AL(`menus')} Menu commands

Dictionary menu commands

Dictionary menu	Description
Select	Selects an existing data dictionary from the Select A Dictionary dialog box.
Register	Registers a new data dictionary in the Data Dictionaries list.
Unregister	Unregisters a data dictionary in the Data Dictionaries list. Unregistering does not delete a data dictionary, but prevents it from appearing in the Select a Dictionary dialog box.
New	Creates a new data dictionary.
Delete	Removes a data dictionary.
Import From Database	Imports schema information from an existing database into a data dictionary.
Import From File	Imports exported dictionary contents from a flat file.
Export To File	Exports a data dictionary to a flat file. This option is useful for sharing data dictionaries among different developers.

{button ,AL(`menus')} Menu commands

Edit menu commands

Edit menu	Description
Undo	Cancels last command or reverts text to its previous state
Cut	Copies and removes the selected text.
Copy	Copies but does not remove the selected text.
Paste	Pastes a cut or copied string into the selected location.
Delete	Deletes the selected text.
Select All	Selects all text on the Enter SQL page or Text page.
Text	Lets you edit the selected SQL object in the code editor when the Database Explorer is started from within the IDE.

{button ,AL(`menus')} Menu commands

View menu commands

View menu	Description
Toolbar	If checked, the toolbar is displayed near the top of the Database Explorer. The toolbar offers a few convenient icons that duplicate the functionality of menu commands such as Open, Delete, Cancel, Apply, Explore Blobs.
Status Bar	If checked, a status bar appears at the bottom of the Database Explorer window. It states how many items are found in the object highlighted in the left pane.
Blob Explorer	This command (and the Explore Blobs toolbar icon) opens the Blob Explorer. This window displays selected Blobs (binary large objects) as a graphic image, or as text.
System Data	If checked, displays system data such as SQL server system tables, InterBase system indices and triggers, and so on. If you don't want to see system objects, you can uncheck this item.
Complete Text	Shows the text for the entire tree of dependent objects. That text is not editable.
Change Text	If checked, lets you see the queries that will be executed for the selected object when you apply your changes.
Large Icons	If checked, displays the contents of objects highlighted in the left paneas large icons in the right pane.
Small Icons	If checked, displays the contents of objects highlighted in the left pane as small icons in the right pane.
List	If checked, displays the contents of objects highlighted in the left pane as a list in the right pane.
Detail	If checked, displays detailed information about objects highlighted in the left pane as a list in the right pane.
Auto Arrange	Auto Arrange works as in the Windows 95 Explorer: it arranges icons in the summary page automatically if the page is resized.
Refresh	If enabled for the currently selected object, Refresh retrieves server information and redraws the display of the object and its children.

{button ,AL(`menus')} Menu commands

Options menu commands

Options menu	Description
Query	Sets query format options, including Live Queries; if checked, the result set returned by queries is editable. Same as RequestLive property of TQuery.
Transaction Isolation	Specifies the transaction isolation level used by an SQL server: Dirty Read, Committed Read, or Repeatable Read.
Word Wrap	If checked, lines of text wrap on the Enter SQL and Text pages; otherwise, text stays on one line until you press Enter to start a new line.
Show Confirmations	If checked, a confirm dialog is displayed before performing any modifications.
Show Warnings	If checked, warns whenever data or meta-data might be lost during server operations.
Sync Pages	If checked, the schema information of the selected database is located in the selected dictionary when you switch from the database page to the dictionary page.

{button ,AL(`menus')} Menu commands

Help menu commands

Help menu	Description
Contents	Displays the WinHelp contents window.
About	Displays version and copyright information.

{button ,AL(`menus')} Menu commands

Context menu commands (Data page)

When you right-click in the Data tabbed page (right pane), you can right-click it to display a context menu of commands that can be used to sort, filter, and show a range of data.

Context command	Description
Undo	Cancels last command or reverts to previous state
Cut	Copies and removes the selected text.
Copy	Copies the selected text.
Paste	Pastes the selected text.
Delete	Deletes the selected text.
Select All	Selects all text in an edit box.
Begin Transaction	Lets you start an SQL transaction.
Commit Transaction	Completes the ongoing transaction.
Rollback Transaction	Cancels the ongoing transaction.
Order	Specifies an index to sort on, or <none> for no sorting.
Range	Specifies a range of data to display.
Filter	Uses an expression to determine which data to display.

{button ,AL(`UI')} Database Explorer user interface

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Context menu commands (Enter SQL page)

When you highlight an object on the Enter SQL tabbed page, you can right-click it to display a context menu of commands that can be used to edit the SQL statement in the window.

Context command	Description
Undo	Cancels last command or reverts to previous state
Cut	Copies and removes the selected text.
Copy	Copies the selected text.
Paste	Pastes the selected text.
Delete	Deletes the selected text.
Select All	Selects all text in the Enter SQL window.
Load From File	Loads SQL statements from a text file.
Save To File	Saves the SQL statements entered in this window to a text file.
Execute	Executes the current SQL statement(s).
Previous Query	Selects the query that ran just before the current one.
Next Query	Selects the query that ran just after the current one.
Begin Transaction	Starts an SQL transaction.
Commit Transaction	Completes the ongoing transaction.
Rollback Transaction	Cancels the ongoing transaction.
Filter	Uses an expression to determine which data to display in a query's result set.

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Context menu commands (Blob Explorer)

You can right-click in the Blob Explorer to choose these commands.

Context command	Description
Always On Top	If checked, the Blob Explorer stays on top of all other windows.
Show As Default	Shows the contents of a TGraphicsField as a graphic, shows the contents of a TMemoField as text, and is empty for other field types.
Show As Graphic	Forces the Blob Explorer to attempt to display contents of the current field as a graphic.
Show As Text	Forces the Blob Explorer to attempt to display contents of the current field as text.

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Key commands

You can expand and contract the hierarchy of objects in the left pane by using the following keystrokes.

To do this...	Press this key...
Expand object (display child objects)	+ (plus sign) or Right key
Contract object (hide child objects)	- (minus sign) or Left key
Show entire tree (display all levels)	* (asterisk)

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Dictionary page

The Dictionary page shows databases and attribute sets available in the data dictionary. To display the Dictionary page, click the Dictionary tab in the left pane of the Database Explorer.

A data dictionary is a special database used to store attribute sets for field components in Delphi and C++Builder datasets. An attribute set describes a field component's properties, field type, and the type of visual control to create when the field component is dragged onto a form. By storing attribute sets in a data dictionary, you need only set properties once for a single component, and can then apply the attribute set to other field components that should share the same properties.

Attribute sets can be created for any database. You can derive attribute sets from an existing database by importing the database into the data dictionary, or you can create attribute sets directly from the Fields editor when working with a data set in a data module or form.

To view available databases and attribute sets, click to expand the tree in the left pane. You can use the Dictionary menu to create and edit data dictionary objects and can view and edit current settings on the tabbed pages in the right pane.

You can import constraints and defaults from SQL servers. To take advantage of this feature, you need to create a new dictionary or upgrade your current one. For details, see Data dictionaries and constraints.

For more information on creating and editing data dictionary objects and interpreting information in the left and right panes of the Database Explorer, click a button below.

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Creating a data dictionary

To create a new data dictionary:

1. Click the Dictionary tab in the left pane.
2. Select the Dictionary object in the left pane.
3. Right-click the Dictionary object.
4. Select New from the menu.
5. Enter a name for the dictionary.
6. Select the dictionary database alias.
7. Enter a table name for the dictionary's data.
8. Optionally, enter a description of the data dictionary.

Once you have added the required information, click OK.

To include the contents of an existing dictionary in a new one:

1. Use Dictionary|Export To File to save the contents of the current dictionary to a file.
2. Use Dictionary|New to create a new dictionary.
3. Use Dictionary|Import From File to import the file created in step 1 into the new dictionary.

{button ,AL(`repo')} Dictionary topics

Importing attribute sets and table definitions into a data dictionary

To import attribute sets and table definitions into a data dictionary:

1. Choose Import Database from the Dictionary menu. The Import Dictionary dialog box appears.
2. Select or enter the dictionary from which to import attribute sets and choose OK.

{button ,AL(`repo')} Dictionary topics

Updating attribute sets

To modify an attribute set:

1. Expand the Dictionary object in the left pane until the Attribute Sets object appears.
2. Click the plus sign beside the Attribute Sets object to display available attribute sets.
3. Select the attribute set to modify in the left pane. The Definitions page appears in the right pane.
4. Edit the desired attribute set properties.
5. Right-click the attribute set to invoke the context menu, and choose Apply to apply your edits to the attribute set.

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Creating a new attribute set

To create a new attribute set:

1. Expand the Dictionary object in the left pane until the Attribute Sets object appears.
2. Right-click the Attribute Sets object to invoke the context menu, and choose New. The Definition page appears in the right pane.
3. Enter a name for the attribute set in the left pane.
4. Optionally specify a TField Class for the attribute set on the Definitions page in the right pane. The TField Class specifies the type of field component to create for a data field added to a dataset.
5. Optionally specify a TControl Class for the attribute set on the Definitions page. The TControl Class specifies the type of data-aware control to insert in a form when fields that use this attribute set are dragged from the Fields editor to a form.
6. Set the properties for the attribute set in the Definitions page.
7. Right-click the attribute set object in the left pane to invoke the context menu, and choose Apply to add the attribute set to the Attribute Sets object.

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Attribute set

An attribute set in a data dictionary corresponds to the field type, properties, and the data-aware control that should be automatically created for a TField object when it is dragged to a form from the Fields editor at design time.

You can create attribute sets in the Database Explorer, or from the Fields editor.

To create an attribute set from the Fields editor:

1. Set the properties for a field component using the Object Inspector.
2. Right-click the field in the Fields editor to invoke the context menu.
3. Choose Save to assign the attribute set the same name as the field or choose Save As to specify a different name for the attribute set.

When an attribute set is selected in the Database Explorer's left pane, the parameters for the attribute set appear on the Definitions page in the right pane. You can edit these parameters as needed. The following table lists the parameters for an attribute set and describes what they are used for:

Attribute	Definition
TField Class	The type of a field to create when a field is added to a dataset. Blank yields a default TField depending on the physical data type.
TControl Class	The type of a control to create when you drag a field onto a form. Blank yields a default TControl depending on the type of the TField.
Alignment	Used to center, left- or right-align data in an edit or grid control.
DisplayLabel	The column heading for a field displayed by a grid component. If DisplayLabel is empty, the FieldName property is used to supply the column heading.
DisplayWidth	The number of characters used to display a field in a grid control.
ReadOnly	True/False. Determines if the field is read only.
Required	True/False. Determines if a field value must be entered in a control.
Visible	True/False. Determines if a field is available for display in a grid control.
Transliterate	True/False. Determines if a field's type is translated as necessary between types in different databases.
EditMask	The mask used to limit data that can be put into a masked edit box or entered into a data field.
DisplayFormat	Used to format the value of a field for display purposes.
EditFormat	Used to edit the format of a field.
MaxValue	The maximum value allowed in a field.
MinValue	The minimum value allowed in a field.
Currency	True/False. Indicates if the field is a currency field.
Precision	Used in formatting numeric fields. The value of Precision is the number of decimal places to the right of the decimal point the numeric value should be formatted before rounding.
DisplayValues	Controls how a TBoolean field is translated to and from display format.
BlobType	Specifies the type of blob associated with a memo or graphic control.
Based On	Specifies another attribute set upon which this one is based. Changed made to properties in this attribute set override those in the attribute set upon which it is based.

Note: Not all properties apply to all fields that use an attribute set. For example, if you specify a

MaxValue property in the attribute set, but then apply the set to a TStringField object, MaxValue is ignored.

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Applying an attribute set to a TField object

To apply an attribute set to a TField object:

1. Double-click a dataset to invoke the Fields editor.
2. Select the field to which to apply the attribute set.
3. Right-click the field to invoke the context menu.
4. Choose Associate attributes.
5. Select or enter the attribute set to apply from the Attribute set name dialog box. If there is an attribute set in the data dictionary that has the same name as the current field, that attribute set's name appears in the combo box.

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Data dictionaries and constraints

You can now use the Database Explorer to import constraints and defaults from SQL servers. To take advantage of this feature, you need to create a new dictionary or choose Yes in the upgrade dialog box when attempting to import any item into the dictionary. To include the contents of an existing dictionary in a new one, see Creating a data dictionary.

Constraints and defaults are automatically imported when you use either Dictionary|Import From Database or Object|Import To Dictionary.

For a list of constraint and default information imported into the dictionary for each server, see Constraint and default information imported for each server.

The dictionary contains SQL expressions for constraints and defaults in these locations:

- The following properties under Database\Table\Check Constraints: ImportedConstraint, CustomConstraint, and ErrorMessage
- The following properties under Attribute Sets: ImportedConstraint, CustomConstraint, ConstraintErrorMessage, Default Expression, and Domain Name.

If an SQL expression contained on a server is not supported by the BDE/DBCLIENT DLLs, then the contents of the expression are put inside comments when imported into the dictionary.

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Constraint and default information imported for each server

Data dictionaries and constraints gives an overview of how constraint and default information is imported into data dictionaries. The following list tells what is imported for each server:

For servers that support record constraints each constraint is imported into the dictionary in the "Check Constraints" section under each table. Note that Oracle, Informix, and DB2 consider all constraints as table constraints, even if they operate on only one field of a table.

When importing information for individual fields, if the field is based on a domain (as in InterBase) or a data type (as in MS SQL Server or Sybase), then an attribute set is created for this domain or data type and the default and constraint information for the domain is added to the attribute set. By default, the attribute set is named after the domain or data type. The field is linked to this attribute set.

If a field has its own default value or rule, then an attribute set is created for the field and given a name constructed from concatenating the table and field name. The field is then linked to this attribute set. If the field is also based on a domain or data type, then this field attribute set is based on the attribute set for the domain or data type.

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Databases and Dictionary pages

Use these pages to view and edit database aliases and data and to create and edit dataset attribute sets:

Databases page

Dictionary page

Databases page

The Databases page shows aliases of available databases. To view the Databases page, click the Databases tab in the left pane of the Database Explorer.

You can view and edit current settings on the tabbed pages in the right pane.

For more information on creating and editing database objects and interpreting information in the left and right panes of the Database Explorer, click a button below.

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Working with database aliases

You can use the Database Explorer to view, create, and modify Borland Database Engine (BDE) aliases. The following table lists each task and briefly describes the steps needed to accomplish it on the Databases page:

Task...	Instructions...
View aliases...	1. Click the plus sign beside a database object in the left pane to see a list of alias objects. 2. Select the alias to view in the left pane. The Definitions page appears in the right pane.
Create an alias...	1. Select a database object in the left pane. 2. Right-click to invoke the context menu. 3. Choose New. 4. Select an alias type in the New Database Alias dialog box and choose OK. 5. Type a name for the alias in the left pane. 6. Enter a path for the alias in the PATH text box on the Definitions page in the right pane. Optionally specify a driver in the Default Driver text box and edit other settings as needed. 7. Right-click the database object in the left pane to invoke the context menu and choose Apply to update the database.
Modify an alias...	1. Select the alias to modify in the left pane. The Definitions page appears in the right pane. 2. Edit settings on the Definitions page as desired. 3. Right-click the database object in the left pane to invoke the context menu and choose Apply to update the database.
Delete an alias...	1. Select the alias to delete in the left pane. 2. Right-click to invoke the context menu. 3. Choose Delete to remove the alias. 4. Right-click the database object to invoke the context menu and choose Apply to update the database.

Note: If you're creating a new ODBC alias, you must define its DSN before you can connect to that database.

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Aliases

An alias is a name and a set of parameters that describe a network resource. BDE applications use aliases to connect with shared databases. An alias is not required to address a local database, but it is required to address an SQL database.

Working with table data

You can use the Database Explorer to view, edit, insert, and delete data in tables. The following table lists each task and briefly describes the steps needed to accomplish it on the Databases page:

Task...	Instructions...
View table data...	1. Select a table to view in the left pane. 2. Click the Data page tab in the right pane to view a scrollable grid of all data in the table. 3. Use the navigator buttons at the right side of the Database Explorer toolbar to scroll from record to record.
Edit a record...	1. Edit the record's fields in the grid. 2. To post the edits to the database, select a different record in the grid or click the navigator's Post button in the toolbar. 3. To cancel an edit before moving to another record click the navigator's Cancel button in the toolbar or press ESC.
Insert a new record...	1. Place the cursor on the row before which you wish to insert another row. 2. Click the navigator's Insert button in the toolbar. A blank row appears. 3. Enter data for each column. Move between columns with the mouse, or by tabbing to the next field. 4. To post the insert to the database, select a different record in the grid or click the navigator's Post button in the toolbar. 5. To cancel an insert before moving to another record click the navigator's Cancel button in the toolbar or press ESC.
Delete a record...	1. Place the cursor on the row you wish to delete. 2. Click the navigator's Delete button in the toolbar.

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Entering SQL statements

In some versions of Delphi and C++Builder, the SQL Explorer permits you to make SQL queries against an SQL database on a remote server. In other versions, the Database Explorer permits you to make queries against Paradox and dBASE tables.

To query a database using SQL:

1. Select a database object in the left pane.
2. Click the Enter SQL tab in the right pane to display an edit box where you can enter an SQL statement to execute.
3. Enter an SQL statement in the edit box. If you enter non-SELECT statements, be sure to uncheck LIve Query by choosing Options|Query before executing the statement.
4. Click the Run button to execute the query.

You can copy SQL statements from text files, a Help window, or other applications and paste them into the edit box. See Context menu commands (Enter SQL) for more information about copying, pasting, and loading SQL statements from a file.

Note: If the SQL syntax you enter is incorrect, an error message is generated. You can freely edit the Enter SQL field to correct syntax errors.

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Blob Explorer dialog box

The Blob Explorer dialog box is used to display the contents of memo or graphics data in a blob (binary large object) field. While you can open the Blob Explorer at any time, it is only meaningful when you are browsing or editing blob data in a table. When you select a blob field, the blob data is displayed in this window.

If the field is a TGraphicsField, the Blob Explorer attempts to display the graphic. If the field is a TMemoField, the Blob Explorer attempts to display the blob text. For other blob field types, the Blob Explorer dialog box is empty. If you know the contents of another field type is text or graphics, you can right-click the dialog box to invoke a context menu from which you can choose Show As Text or Show As Graphic to force display of the field.

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Database Explorer toolbar

The Database Explorer toolbar contains the following buttons for executing commands:

Button	Command
 Open	Open a new object.
 Delete	Delete a selected object (does not apply to data edited on the Data page in the right pane of the Database Explorer).
 Cancel	Abandon modifications to a selected object (does not apply to data edited on the Data page in the right pane of the Database Explorer).
 Apply	Commit modifications of a selected object to the database (does not apply to data edited on the Data page in the right pane of the Database Explorer).
 Explore Blobs	Displays a form for displaying text and graphics blobs associated with data in a table.

When the Enter SQL page appears in the right pane of the Database Explorer, the toolbar contains these buttons to the right of the Explore Blobs button for controlling transactions:

Button	Command
Begin Or Commit Transaction	Starts and posts database transactions.
Rollback Transaction	Cancels the most recent database transaction.

When the Data page appears in the right pane of the Database Explorer, the toolbar also contains the following buttons for displaying and editing records:

Button	Command
 First Record	Go to first record.
 Prior Record	Go to previous record.
 Next Record	Go to next record.
 Last Record	Go to last record.
 Insert Record	Insert a new record.
 Delete Record	Delete the current record.
	Edit the current record.

Edit Record

Post a changed record to the database.

Post Edit

Abandon editing or inserting of a record.

Cancel Edit

Fetch a new view of data from the database.

Refresh Data

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Definition page

The Definition page in the right pane displays parameters of the object highlighted in the left pane.

Summary page

The Summary page in the right pane displays the database objects contained within the parent object highlighted in the left pane. Double-click an object on the Summary page to show it in the left pane.

Text page

The Text page in the right pane displays the text of SQL objects. When you choose View|Complete Text, the text is not editable. When you choose View|Change Text, a panel at the bottom of the page shows queries that will be executed for the selected object when you apply your changes.

Data page

The Data page in the right pane displays the data in the table, view, or synonym selected in the left pane.

Enter SQL page

The Enter SQL page in the right pane displays a window for entering SQL statements.

Next Query command

Right-click and choose Next Query to select the SQL query that ran just after the current one. You can also use the Next Query button in the lower right corner of the Enter SQL page.

Previous Query command

Right-click and choose Previous Query to select the SQL query that ran just before the current one. You can also use the Previous Query button in the lower right corner of the Enter SQL page.

Always On Top command

When you right-click in the Blob Explorer dialog box and check Always On Top, the Blob Explorer dialog box always stays in front with all other windows behind it.

Auto Arrange command

Right-click and choose Auto Arrange or View|Auto Arrange to arrange icons in the summary page automatically if the page is resized. Auto Arrange works as in the Windows 95 Explorer.

Begin Transaction command

When you right-click in the Enter SQL page or Data page, you can choose Begin Transaction to start the current SQL transaction. Once you begin a transaction, you can choose Commit Transaction to complete it or Rollback Transaction to cancel it.

You can also use the Begin Or Commit Transaction button that appears to the right of the Blob Explorer button when the Enter SQL page is visible.

Blob Explorer command

Right-click and choose Blob Explorer or View|Blob Explorer to open the Blob Explorer. This window displays the selected blob field as a graphic image or as text.

Change Text command

Check View|Change Text to display queries that will be executed when you apply your changes. The queries are listed in a read-only Changes area on the Text page.

Commit Transaction command

Right-click and choose Commit Transaction to complete the ongoing SQL transaction.

This command appears on the context menu when you right-click in the Enter SQL page or Data page (Database Explorer) after using Begin Transaction. To cancel the transaction instead of completing it, choose Rollback Transaction.

You can also use the Begin Or Commit Transaction button that appears to the right of the Blob Explorer button when the Enter SQL page is visible.

Delete A Dictionary dialog box

The Delete A Dictionary dialog box is used to specify the name of an existing data dictionary you want to delete. Enter or select the name of an existing data dictionary in the Dictionary Name combo box. To display the Delete A Dictionary dialog box, choose Dictionary|Delete.

Detail command

Use View|Detail to determine how information appears in the right pane. If checked, the contents of objects highlighted in the left pane appear as a list in the right pane. Related commands are View|List, View|Large Icons, and View|Small Icons.

Execute command

Right-click and choose Execute to run the current SQL statement. This command appears when you right-click in the Enter SQL page.

Export To File command

Use Dictionary|Export To File to store a data dictionary as a flat file. This option is useful for sharing data dictionaries among different developers. This command displays the Export Dictionary To A File dialog box. Once you have exported a file, you can use Dictionary|Import From File to import and use it again.

Export Dictionary To A File dialog box

The Export Dictionary To A File dialog box is used to specify how and where to export a data dictionary in Borland Dictionary Export File (.BDX) format.

To display the Export Dictionary To A File dialog box, choose Dictionary|Export To File.

The following table lists the controls for this dialog box and explains how they are used.

Control	Purpose
Export File edit box	Specifies the name of the export file to create.
Browse button	Displays the Export File dialog box. This is basically the standard File Save dialog box (available as a component on the Dialogs page of the Component Palette). The Files of type combo box, however, is preset to search for files in Borland Dictionary Export format (.BDX). When you choose a file in this dialog, it is inserted into the Export File edit box in the Export Dictionary to a File dialog box.
Export type radio buttons	Specifies the type of dictionary data to export. Choices are: 1. All Dictionary contents. This option exports all attribute sets for all available databases. 2. Selected databases. This option enables you to specify the databases from which to export attribute sets. 3. Selected attribute sets. This option enables you to specify which attribute sets belonging to a single database are to be exported.
Export List list box	Enables you to multi-select databases or attribute sets to export.

Filter command

When you right-click and choose Filter on the Data page in the right pane, you can enter an expression that specifies which data to display. The Set Filter dialog box appears.

When you right-click in the Enter SQL page and choose Filter, you can specify which query results to display.

Set Filter dialog box

You can use this dialog box to enter an expression that determines what displays on the Data page or in an SQL query result set. To display the Set Filter dialog box, right-click and choose Filter on the Data page or the Enter SQL page.

Dialog box options

Filter Expression
The expression that specifies which data to display.

Import From Database command

Use Dictionary|Import From Database to import table schema information from an existing database into a data dictionary. This command displays the Import Database dialog box.

Any constraints and defaults set on the server are automatically imported.

Import Database dialog box

The Import Database dialog box is used to specify the name of an existing database whose column attributes you want to import into the current data dictionary as attribute sets. Enter or select the name of an existing data dictionary in the Database Name combo box.

To display the Import Database dialog box, choose Dictionary|Import From Database.

Import From File command

Use Dictionary|Import From File to retrieve table schema information from a flat file. This command displays the Import From File Into Dictionary dialog box. To create a file to import, use Dictionary|Export To File.

Import From File Into Dictionary dialog box

The Import From File Into Dictionary dialog box is basically the standard File|Open dialog box (available as a component on the Dialogs page of the Component Palette). The Files Of Type combo box, however, is preset to look for flat files with the Borland Dictionary Export Files extension (.BDX). This file type contains a previously exported data dictionary.

To display this dialog box, choose Dictionary|Import From File.

Import To Dictionary command

Right-click and choose Import To Dictionary or Object|Import To Dictionary to import table schema information from the selected table into the current dictionary.

Any constraints and defaults set on the server are automatically imported.

This command is similar to Import From Database, but that command only imports whole databases while you can use Import To Dictionary to import individual tables, views, and domains.

When you use this command, a confirmation dialog box appears. Choose OK to continue the import or Cancel to end the operation.

Import To Dictionary dialog box

When you right-click and choose Import To Dictionary or choose Object|Import To Dictionary, table schema information from the selected table is imported into the current dictionary.

If the current dictionary was created from within an earlier version of Delphi, this dialog box appears.

Choose Yes to convert the current dictionary to the latest Delphi dictionary format and import the selected object into it.

Choose No to import the selected object into the current dictionary without upgrading the dictionary's format. Any constraints or other dictionary features that were not supported in earlier versions will be ignored during the import.

Choose Cancel to close this dialog box without upgrading the dictionary format or importing the selected object into the current dictionary.

Note: When you choose Yes to upgrade the current dictionary, the dictionary is first exported to a file named IMPEXP.BDX. Then, that file is imported. Should the dictionary import procedure fail for some reason -- such as lack of disk space, for example -- you can use Dictionary|Import From File to import IMPEXP.BDX manually.

Expression Editor dialog box

You can use this dialog box to create dictionary entries. Choose Validate to test the validity of the entered expression.

The following operators are allowed:

Relational operators	=, <>, >, < , >=, <=, IS NULL, IS NOT NULL, BETWEEN
Arithmetic operators	*, / , - , + (Note: + works on strings and - works as both a binary and unary operator.)
String operators	LIKE
String functions (SQL-92 syntax)	UPPER LOWER TRIM (<string value>) -- trims the leading and trailing spaces from the string value. TRIM (<character value> from <string value>) -- trims the leading and trailing <character value>s from the string value. Additionally, LEADING, TRAILING, or BOTH can be used to specify which sides of the string to trim. For, example `TRIM(TRAILING 'X' FROM 'ZZZX')` returns 'ZZZ' `TRIM(TRAILING FROM 'ZZZ  ')` also returns 'ZZZ' SUBSTRING (<starting position> FROM <string value>) returns the substring of <string value> starting at the position specified in <starting position>, which must be a numeric value. SUBSTRING (<starting position> FROM <string value> FOR <length>) returns the substring of <string value> starting at the position specified in <starting position>, which must be a numeric value (as described previously), but returns at most <length> characters starting from <starting position>.
Miscellaneous	IN EXTRACT( ) (SQL 92 syntax) -- isolates a single numeric field from a date/time field on retrieval using the following syntax: EXTRACT (<extract_field> FROM <field_name>) For example, the following statement extracts the year value from a DATE field: `EXTRACT(YEAR FROM HIRE_DATE)` You can also extract MONTH, DAY, HOUR, MINUTE, and SECOND using this function. EXTRACT does not support the TIMEZONE_HOUR or TIMEZONE_MINUTE clauses. SYSDATE, getdate() -- functions for fetching the current date and time.

Note: About SQL NULL Handling:

Expressions are evaluated using standard SQL 92 NULL semantics, which means, for example, that an expression such as `NameField  <> 'Delphi'` will evaluate to FALSE if the value of

NameField is NULL. To allow NULL values when using such an expression you must enter `NameField <> 'Delphi' OR NameField IS NULL .`

Large Icons command

Use View|Large Icons to determine how information appears in the right pane. If checked, contents of objects highlighted in the left pane appear as large icons in the right pane. Related commands are View|List, View|Detail, and View|Small Icons.

List command

Use View|List to determine how information appears in the right pane. If checked, the contents of objects highlighted in the left pane appear as a list in the right pane. Related commands are View|Detail, View|Large Icons, and View|Small Icons.

Load From File command

Right-click in the Enter SQL page and choose Load From File to read in SQL statements from a text file. This command displays the Load Query dialog box. To save Text page contents as files in the Database Explorer, use Save Text To File.

Load Query dialog box

The Load Query dialog box is basically the standard File|Open dialog box. The Files Of Type combo box, however, is preset to look for text files with an extension of .SQL. It is assumed each such file contains a valid SQL query that can be read into the query edit box on the Enter SQL page in the right pane of the Database Explorer or BDE Administrator.

To display this dialog box, right-click in the Enter SQL page and choose Load From File.

Create A New Dictionary dialog box

The Create A New Dictionary dialog box is used to specify information about the new data dictionary you want to create. Follow these steps to create the new data dictionary:

1. Enter a name for the dictionary in the Dictionary Name edit box.
2. Select the dictionary database alias from the Database list box.
3. Enter or select a table name for the dictionary's data in the Table Name edit box.
4. Optionally enter a description of the data dictionary in the Description memo box.
5. Once you have added the required information, click OK.

Order command

Right-click in the Data page and choose Order to specify an index to sort by, or choose <none> to temporarily disable an existing index so new records are not sorted. This command is temporary and does not alter any indices applied to the table.

When you choose Order, the Set Order dialog box appears.

Set Order dialog box

Use the Set Order dialog box to determine the display order of data on the Data page. To display this dialog box, right-click in the Data page and choose Order.

Dialog box options

Index Fields

The field or fields included in the selected index.

Available Indices

Indices you can choose from to specify a sort order for the data.

Indices

Displays the Set Indices dialog box so you can add indices for sorting non-SQL tables and delete indices from the list.

Set Indices dialog box

Use the Set Indices dialog box to add and remove indices for sorting data on the Data page. To display this dialog box, right-click in the Data page and choose Order, then click the Indices button in the Set Order dialog box.

Dialog box options

Indices
Lists each index available for determining the displayed sort order of the selected data.

Add
Adds an index to the list.

Delete
Removes an index from the list.

Clear
Clears all indices from the list.

Query command

Use Options|Query to set options for queries executed on the Enter SQL page. You can configure the Database Explorer for limited compatibility with tools from server vendors, such as Sybase isql.exe and Microsoft SQL Server saf.exe.

When you choose Options|Query, the Query Options dialog box appears.

Query Options dialog box

Use the Query Options dialog box to set options for queries executed on the Enter SQL page. To display this dialog box, use Options|Query.

Dialog box options

Line Delimiter

The string that separates one line from another. By default, Line Delimiter is "---" and no statement delimiter is defined. For Sybase, for example, you would set it to "go".

Stmt Delimiter

The string that separates one statement from another. By default, Stmt Delimiter is "#0", undefined. A typical statement delimiter is ";".

Escape Char

The string that indicates an Escape code. By default, Escape Char is "#0" (undefined).

Escaped Quotes

Check this box to use quotes as string delimiters; uncheck it to treat them as literals.

Comment Styles

The string that delimits a comment.

Query Results

If checked, Request Live Queries indicates that the result set returned by queries is editable. This is the same as the RequestLive property of TQuery.

Range command

Right-click in the Data page and choose Range to specify a range of data to display.

When you choose Range, the Set Range dialog box appears.

Set Range dialog box

Use this dialog box to select a range of data to display on the Data page. To display this dialog box, right-click in the Data page and choose Range.

Dialog box options

From
The smallest value to display in the specified field.

To
The greatest value to display in the specified field.

Exclude
Check for From, To, or both to prevent the specified value(s) from displaying.

Register command

Use Dictionary|Register to register a new data dictionary in the Object Repository. This command displays the Register An Existing Dictionary dialog box.

Register An Existing Dictionary dialog box

The Register An Existing Dictionary dialog box is used to specify information about an existing data dictionary you want to store in the Object Repository.

To display this dialog box, choose Dictionary|Register.

Follow these steps to register a data dictionary:

1. Enter a name for the dictionary in the Dictionary Name edit box.
2. Select the dictionary database alias from the Database list box.
3. Enter or select a table name for the dictionary's data in the Table Name edit box.
4. Optionally enter a description of the data dictionary in the Description memo box.
5. Once you have added the required information, click OK.

Rollback Transaction command

Right-click and choose Rollback Transaction to cancel the ongoing SQL transaction.

This command appears on the context menu when you right-click in the Enter SQL page or Data page after using Begin Transaction. To complete the transaction instead of canceling it, choose Commit Transaction.

You can also use the Rollback Transaction button, the second button to the right of the Blob Explorer button when the Enter SQL page is visible.

Save Text To File command

When the selected SQL object has a text representation on the Text page, you can right-click and use Save Text To File to save the object's text to a text file.

You can also save a change script to a text file, which can be useful when you want to reuse the script on different systems with the same SQL object. To save a change script, click or tab into the change script, right-click, and choose Save Text To File. Unless the change script is selected, choosing Save Text To File saves the object, not the script.

When you choose Save Text To File, the Save Query dialog box appears. Locate the desired target directory and enter a new name for the file or choose an existing file to overwrite.

Save To File command

You can right-click in the Enter SQL page and use Save To File to save the SQL statements entered in this window to a text file.

When you choose Save To File, the Save Query dialog box appears. Locate the desired target directory and enter a new name for the file or choose an existing file to overwrite.

Save Query dialog box

Dialog Box options

The Save Query dialog box is basically the standard File|Save dialog box. The Files Of Type combo box, however, is preset to save the current SQL statements or text as a text file with an extension of .SQL.

To display this dialog box, right-click and choose Save To File on the Enter SQL page or Save To Text File on the Text page (in Database Explorer).

Select command

Use Dictionary|Select to select an existing data dictionary from the Select A Dictionary dialog box.

Select A Dictionary dialog box

The Select A Dictionary dialog box is used to specify the name of an existing data dictionary you want to make the active dictionary. Enter or select the name of an existing data dictionary in the Dictionary Name combo box.

To display this dialog box, choose Dictionary|Select.

Show As Default command

Right-click in the Blob Explorer and choose Show As Default to show the contents of a TGraphicsField as a graphic, show the contents of a TMemoField as text, and show nothing for other field types.

You can use Show As Graphic or Show As Text to force the Blob Explorer to display the contents of the current field in the specified way.

Show As Graphic command

By default, the Blob Explorer shows the contents of a TGraphicsField as a graphic, shows the contents of a TMemoField as text, and shows nothing for other field types.

You can right-click in the Blob Explorer and choose Show As Graphic to force the Blob Explorer to attempt to display the contents of the current field as a graphic.

Show As Text command

By default, the Blob Explorer shows the contents of a TGraphicsField as a graphic, shows the contents of a TMemoField as text, and shows nothing for other field types.

You can right-click in the Blob Explorer and choose Show As Text to force the Blob Explorer to attempt to display the contents of the current field as text.

Small Icons command

Use View|Small Icons to determine how information appears in the right pane. If checked, the contents of objects highlighted in the left pane appear as small icons in the right pane. Related commands are View|Detail, View|Large Icons, and View|List.

Sync Pages command

Check Options|Sync Pages to import the schema information of the selected database into the selected dictionary when you switch from the database page to the dictionary page. You are prompted to confirm this operation if Confirm Edits is checked.

System Data command

If View|System Data is checked, system data such as SQL server system tables, InterBase system indices and triggers, and so on is displayed. If this is irrelevant to your purpose, you can uncheck this item.

Text command

When the Database Explorer is started from within the IDE, you can choose Edit|Text to edit the selected SQL object in the code editor. While you edit an SQL object in the code editor, the object's text is read-only in the BDE Administrator.

Text Font command

Use View|Text Font to set a font for text on the Text tab and Enter SQL tab.

Toolbar command (Database Explorer)

If View|Toolbar is checked, the Database Explorer toolbar appears near the top of the Database Explorer. The toolbar offers a few convenient icons duplicating the functionality of menubar commands such as Open, Delete, Cancel, Apply, Explore Blobs.

Complete Text command

If View|Complete Text is checked, the text for the entire tree of dependent objects appears, and is uneditable.

For example, when you view the text of a table definition, you see table options such as space allocation, and column information. You can edit this text.

When Complete Text is checked, you also see corresponding index, primary key, foreign key, constraints, and trigger text, plus any other text that the server supports that would be deleted along with the table. You are unable to edit this text.

Unregister command

Use Dictionary|Unregister to unregister a data dictionary in the Object Repository. Unregistering does not delete a data dictionary, but prevents it from appearing in the Select A Dictionary dialog box.

This command displays the Unregister A Dictionary dialog box.

Unregister A Dictionary dialog box

The Unregister A Dictionary dialog box is used to specify the name of an existing data dictionary you want to remove from the Object Repository. Enter or select the name of an existing data dictionary in the Dictionary Name combo box.

To display this dialog box, choose Dictionary|Unregister.

Word Wrap command

If Options|Word Wrap is checked, long lines of text and SQL statements wrap to display completely on the Text and Enter SQL pages. Otherwise, long lines extend to the right so you must scroll to view them.

Transaction Isolation command

Choose Edit|Transaction Isolation to specify an isolation level for SQL transactions.

 Choose Dirty Read to return any change, regardless of whether the record has been committed.

 Choose Committed Read to return only committed versions of the record; uncommitted changes will not be reflected in the result.

 Choose Repeatable Read to return only the original record for the duration of the transaction, even if another application has committed a change.

For more information on these levels, see the documentation for your SQL server.

BDE Administrator command

Use BDE Administrator menu command to launch the BDE Administrator configuration utility from within the Database Explorer. You can use this utility to:

 Configure the Borland Database Engine (BDE)

 Configure STANDARD (Paradox and dBASE/FoxPro), SQL, Access, and ODBC drivers; create and delete ODBC drivers.

To display this command, right-click on the Dictionary or Databases page, or open the Object menu.

Save As command

Right-click and choose Save As or Object|Save As to save the selected object under the same or a different name. If you specify a new name, a new object is created and any editing changes are applied to the new object. Edits to the original object remain intact, but are not applied to the original object until you choose to apply them.

When you choose Save As, the Save As dialog box appears.

Save As dialog box

You can use the Save As dialog box to save the selected object under the same or a different name. To display this dialog box, use Save As or Object|Save As.

Dialog box options

New Name

Enter the new name for the object in the edit box. By default, the current name is proposed. Choose OK without changing the name to use it.

Select All command

Right-click and choose Select All or Edit|Select All to select all text in the current edit box or on the Enter SQL or Text page.

About command

Use Help|About to display version and copyright information for Database Explorer or the BDE Administrator (this item does not appear when you invoke the Database Explorer from the Delphi IDE).

Apply command

Right-click and choose Apply or Object|Apply to save the highlighted object, including all changes and pending deletes to objects within its tree.

Cancel command

Right-click and choose Cancel or Object|Cancel to cancel the current operation.

Close command

Right-click and choose Close or Object|Close to close the highlighted object.

Show Confirmations command

Use Options|Show Confirmations to help prevent unwanted changes. If checked, a confirmation dialog is displayed after performing any modifications.

Show Warnings command

Use Options|Show Warnings to toggle the display of warning messages when data loss or meta-data loss can occur while editing.

For example, data loss can occur if a table column is moved; the table will be dropped and the columns recreated in the new order. Meta-data loss can occur if the contents of a view object are altered.

If Show Warnings is checked, warnings occur where appropriate for each object that is operated upon.

Contents command

Use Help|Contents to display the table of contents window for online Help.

Copy command

Right-click and choose Copy or Edit|Copy to put the selected parameter, field data, or text on the Windows Clipboard without removing it.

Cut command

Right-click and choose Cut or Edit|Cut to put the selected parameter, field data, or text on the Windows Clipboard and remove it.

Delete command

Right-click and choose Delete or Object|Delete to remove the highlighted object or text without putting it on the Windows Clipboard.

Right-click and choose Delete or Edit|Delete to remove selected text on the Enter SQL or Text (Database Explorer) pages.

In Database Explorer, use Dictionary|Delete to remove a data dictionary. This command displays the Delete A Dictionary dialog box.

Exit command

Right-click and choose Exit or Object|Exit to close the Database Explorer or BDE Administrator window.

New command

Right-click and choose New or Object|New to create a new instance of the highlighted object class. If the selected object is a database name, the New Database Alias dialog box appears.

In the Database Explorer, use Dictionary|New to create a new data dictionary. This command displays the Create A New Dictionary dialog box.

New Database Alias dialog box

The New Database Alias dialog box is used to select a driver which represents the kind of alias to create.

To display this dialog box, choose Object|New on the Databases page.

Note: If you're creating a new ODBC alias, you must define its DSN before you can connect to that database.

Dialog box options

Database Driver Name

The driver type of the new alias to created. The default name assigned is the driver name. To enter another name, select the alias, right-click and choose Rename.

Open command

Right-click and choose Open or Object|Open to open the highlighted object.

Open dialog box options

Look In
Displays the current directory. The list below shows the files and folders in that directory.

File Name
Lists the files (*.CFG or *.*) in the current directory.

Files Of Type
Shows the type of files listed in the File Name text box.

Paste command

Right-click and choose Paste or Edit|Paste to paste a cut or copied string into the selected field.

When you right-click in the Enter SQL page in Database Explorer and choose Paste, it copies text from the Windows Clipboard into the current SQL statement.

Previous command (View menu)

Use View|Previous to move to the previously selected object, if any, in the left pane.

Refresh command

Right-click and choose Refresh or View|Refresh to redraw the currently selected object and its children.

Rename command

Right-click and choose Rename or Object|Rename to change the name of the selected object. Type the new name over the old.

Status Bar command

Check View|Status Bar to display a status bar appears at the bottom of the Database Explorer or BDE Administrator window. It states how many items are found in the object highlighted in the left pane.

Undo command

You can right-click and choose Undo or Edit|Undo to cancel the last command in the Enter SQL page or revert to the previous state in the active parameter field.

Vendor Configuration command

Note: This command name is dynamic and is actually the name of the vendor-supplied configuration utility that is appropriate for the selected driver or alias.

Use *Vendor Configuration* or Object|*Vendor Configuration* to configure SQL drivers or aliases of the highlighted type. If available, the vendor-supplied configuration utility for that driver type or alias appears. If one is not found, an Open dialog box appears, and you can choose an alternate vendor configuration utility. If you specify an alternate utility, it is saved in the registry under Cfgutils and displayed the next time you highlight a driver or alias of that type and choose Vendor Configuration.

For more information, access Help available through utility dialog boxes.

ODBC Administrator command

Use ODBC Administrator to add, delete, and configure ODBC drivers or data sources. This command appears when you right-click the Databases node on the Databases page or the ODBC node on the Configuration page. It displays the ODBC administration utility provided by your ODBC driver vendor.

For more information, display Help within each administrator dialog box.

Note: If you add a new ODBC datasource, you must define its DSN before you can connect to that database.

Version Information command

Right-click and choose Version Information or Object|Version Information to display information on installed BDE DLL and driver files as well as configuration DLLs provided by other vendors. This can be useful when solving technical problems.

The Version Information dialog box appears.

Version Information dialog box

This dialog box displays information on installed BDE DLL files and vendor configuration DLLs, if present. Version information can be useful when solving technical problems.

To display this dialog box, choose Version Information or Object|Version Information.

Dialog box options

DLL Name
The name of a DLL file installed as part of the BDE installation or non-standard server installation (such as an SQL server).

Version Number
The version number assigned to that DLL.

Date
The datestamp for that DLL.

Time
The timestamp for that DLL.

Size
The size in bytes of that DLL.

Cannot find *filename*. Do you want to search for it yourself?

The application is unable to find the vendor configuration utility. Choose OK to browse for it.

Select Directory dialog box

Select the directory where your vendor configuration utility can be found, or other appropriate directory for the parameter you are entering. To close this dialog box without selecting a directory, choose Cancel.

Duplicate driver name.

You tried to give an ODBC driver connection a name already in use for another ODBC driver connection. Each ODBC driver connection in a configuration file should have a unique name.

Click OK in the error message dialog box, then try your entry again.

ODBC is not installed.

An ODBC dynamic link library (ODBC32.DLL) could not be found.

This .DLL is commonly installed in the recommended locations:

Windows\System

or

odbcsdk\bin

Click OK in the error message dialog box, then check to see if ODBC32.DLL is anywhere on the workstation hard disk. If you find the .DLL in a different directory other than those mentioned above, try moving it to the recommended location. Then try your operation again.

If you continue to have problems, you might need to reinstall ODBC.

Help topic not available.

The requested Help topic cannot be found.

The requested Help topic may be in a Help file that has not been installed or that has been installed and deleted.

For example, information on SQL drivers is in the Borland SQL Links Help. If you haven't installed Borland SQL Links, you can only view topics on Paradox, dBASE, and ODBC drivers contained in this Help file.

Apply current configuration changes?

You have made driver configuration changes and have not yet saved them. Choose Yes to save them or no to cancel all changes.

Apply current configuration changes to databases?

You have made configuration changes to BDE databases. Choose Yes to save the changes or No to cancel the changes.

Save changes to databases?

You have made data changes to BDE databases. Choose Yes to save the changes or No to cancel the changes.

To continue operation, databases must be closed. Close databases?

Choose OK to continue and close the databases or Cancel to stop the present operation. You will have a chance to save any databases with unsaved changes.

Select Directory dialog box

This setting requires a directory path where specified data can be stored or accessed. Select the directory that defines the required path (the path destination).

STANDARD alias settings

When you create an alias on the Databases page, you can choose STANDARD to use one of these driver types:

PARADOX Paradox, for .DB tables

DBASE dBASE and FoxPro, for .DBF tables

ASCIIDRV ASCII text, for .TXT tables

To change a setting, highlight the desired configuration parameter. Delete the old value and enter a new one in the appropriate text box. You can only change parameters WITHOUT bold labels.

In the following table, **Parameters** lists all tracked parameters for the selected driver type, and their current settings. When the driver is first installed, all values are set to their defaults.

Description briefly notes the purpose of the highlighted parameter.

Parameter	Description
TYPE	Type of database to which this driver helps you connect, STANDARD.
PATH	The path to the target database.
DEFAULT DRIVER	The type of file to access (see list above to jump to descriptions): PARADOX, DBASE, ASCIIDRV.
ENABLE BCD	Specifies whether BDE translates numeric and decimal fields into floating point values or binary coded decimal (BCD) values. BCD values eliminate the rounding errors associated with floating point math (such as a 3 * (2/3) resulting in 2.00000000001). When ENABLE BCD is set to TRUE, DECIMAL and NUMERIC fields are converted to BCD.

Access driver settings

Applications that use BDE can now open or create Microsoft Access tables using the MSACCESS driver.To work with Access tables, choose MSACCESS as the driver name on the Configuration page of BDE Administrator and highlight the desired configuration parameter, or create or select an alias on the Databases page that uses MSACCESS as the driver name. Delete the old value and enter a new one in the appropriate text box. You can only change parameters WITHOUT bold labels.

In the following table, **Parameters** lists all tracked parameters for the selected driver type, and their current settings. When the driver is first installed, all values are set to their defaults.

Description briefly notes the purpose of the highlighted parameter.

Parameter	Description
VERSION	Internal version number of the Access driver.
TYPE	Type of server to which this driver helps you connect. Can be SERVER (SQL server) or FILE (standard, file-based server).
DLL32	The name of the driver's 32-bit Dynamic Link Library (*.DLL). Driver IDDA3532.DLL (default) for Access 97 and Jet Engine 3.5. Driver IDDAO32.DLL for Access 95 and Jet Engine 3.0.
DRIVER FLAGS	Internal product-specific flag. Do not change without direct instructions from Borland support personnel.
TRACE MODE	A numeric value (bit mask) specifying how much trace information to log. The Windows OutputDebugString call is used to output the requested information to the debug window. The following table shows which information is logged based on bit settings:

Bit Settings	Logged Information
0x0001	prepared query statement
0x0002	executed query statements
0x0004	vendor errors
0x0008	statement options (that is: allocate, free)
0x0010	connect / disconnect
0x0020	transaction
0x0040	BLOB I/O
0x0080	miscellaneous
0x0100	vendor calls

DATABASE NAME	The drive, path, and .MDB file name to access.
USER NAME	Default name for accessing the database.
OPEN MODE	Mode in which the driver connection opens the database. Can be READ/WRITE or READ ONLY. Default: READ/WRITE
LANGDRIVER	Language driver used to determine table sort order and character set.
SYSTEM DATABASE	Path and name of the system security database to be used when opening databases. A change to this setting only takes effect when the driver is unloaded and then reloaded.

Paradox driver settings

To configure the way Paradox tables are created, sorted, and handled, choose Paradox as the driver name on the Configuration page of the BDE Administrator or create or select a STANDARD alias on the Databases page that uses Paradox as the Default Driver.

To change a setting, highlight the desired configuration parameter. Delete the old value and enter a new one in the appropriate text box. You can only change parameters WITHOUT bold labels.

In the following table, **Parameters** lists all tracked parameters for the selected driver type, and their current settings. When the driver is first installed, all values are set to their defaults.

Description briefly notes the purpose of the highlighted parameter.

Parameter	Description
VERSION	Internal version number of the Paradox driver.
TYPE	Type of server to which this driver helps you connect. Can be SERVER (SQL server) or FILE (standard, file-based server).
NET DIR	The directory location of the Paradox network control file PDOXUSRS.NET. The active NET DIR parameter is stored in the Paradox section of the BDE configuration file and has precedence over any other NET DIR parameters that may be stored in older 16-bit configuration files, or in the System Init section of the current configuration file, or in the Registry. These other NET DIR entries will have no effect. To access a Paradox table on a network drive, the active NETDIR parameter in the Paradox section of the BDE configuration file must point to a network drive.
LANGDRIVER	Language driver used to determine table sort order and character set. [available drivers]. US default: 'ascii' ANSI (DBWINUS0)
LEVEL	Type of table format used to create temporary Paradox tables. Level 7 Paradox for Windows 32-bit tables Level 5 Paradox 5.0 tables Level 4 STANDARD table format introduced in Paradox 4.0 Level 3 Compatible table format used by Paradox 3.5 and earlier versions. Default: Level 4. To use Blob fields, secondary indexes, and strict referential integrity, specify either Paradox level 4 or Paradox level 5 tables. You will probably want to use the lowest level possible in order to maximize backward compatibility. Choose Level 7 only If you need the advanced indexing features supported by that table format.
BLOCK SIZE	Size of disk blocks used to store Paradox table records, in multiples of 1024 bytes. Valid settings depend on the table format: Level 5 and 7 1024, 2048, 4096, 16384, and 32768 Level 3 and 4 1024, 2048, and 4096 Default: 2048
FILL FACTOR	Percentage of current disk block which must be filled before Paradox will allocate another disk block for index files. Can be any integer ranging from 1 to 100. Default: 95 **Note:** Smaller values offer better performance but increase the size of indexes. Larger values give smaller index files but increase the time needed to create an index.

STRICTINTEGRTY	Specifies whether Paradox tables can be modified using applications that do not support referential integrity (such as, Paradox 4.0). For example, if TRUE you will be unable to change a table with referential integrity using Paradox 4.0; if FALSE, you can change the table, but you risk the integrity of your data. Default: TRUE.

dBASE and FoxPro driver settings

To configure the way dBASE and FoxPro tables are created, sorted, and handled, choose dBASE as the driver name on the Configuration page of the BDE Administrator or create or select a STANDARD alias on the Databases page that uses DBASE as the Default Driver type.

To change a setting, highlight the desired configuration parameter. Delete the old value and enter a new one in the appropriate text box. You can only change parameters WITHOUT bold labels.

Since FoxPro is an xBASE application, its driver settings are virtually identical to dBASE's except that LEVEL must be set to 25 to read and write a .DBF table in FoxPro format.

In the following table, **Parameters** lists all tracked parameters for the selected driver type, and their current settings. When the driver is first installed, all values are set to their defaults.

Description briefly notes the purpose of the highlighted parameter.

Parameter	Description
VERSION	Internal version number of the dBASE driver.
TYPE	Type of server to which this driver helps you connect. Can be SERVER (SQL server) or FILE (standard, file-based server).
LANGDRIVER	Language driver used to determine table sort order and character set. [available drivers] US. Default: 'ascii' ANSI (DBWINUS0)
LEVEL	Type of table format used to create dBASE temporary tables. Can be 7 for dBASE 7.0 table format, 5 for dBASE 5.0 table format, 4 for dBASE 4.0 table format, or 3 for dBASE III and dBASE III PLUS table formats. Use 25 for FoxPro. Default: 7 **Note**: When accessing dBASE level 7 tables, the driver level must be set to 7.
MDX BLOCK SIZE	Size of disk blocks dBASE allocates for .MDX files, in bytes. Can be any integer that is a multiple of 512. Default: 1024
MEMO FILE BLOCK SIZE	Size of disk blocks dBASE allocates for memo (.DBT) files, in bytes. Can be any integer that is a multiple of 512. Default: 1024

ODBC driver connection settings

To configure the way tables in an ODBC data source are created, sorted, and handled, choose an ODBC driver connection as the driver name on the Configuration page of the BDE Administrator or create or select an alias on the Databases page that uses an ODBC driver.

To change a setting, highlight the desired configuration parameter. Delete the old value and enter a new one in the appropriate text box. You can only change parameters WITHOUT bold labels.

In the following table, **Parameters** lists all tracked parameters for the selected driver type, and their current settings. When the driver is first installed, all values are set to their defaults.

Description briefly notes the purpose of the highlighted parameter.

Parameter	Description
VERSION	Internal version number of the ODBC driver. Do not modify.
TYPE	For drivers, this parameter is Server. It is uneditable.
	For aliases, this parameter uniquely identifies this ODBC driver connection. Can include any combination of alphanumeric characters except : and \.
DLL	The name of the driver's 16-bit Dynamic Link Library (*.DLL). Default: IDODBC16.DLL
DLL32	The name of the driver's 32-bit Dynamic Link Library (*.DLL). Default: IDODBC32.DLL
ODBC DRIVER	The ODBC driver used to connect the workstation to the target ODBC server.
DRIVER FLAGS	Internal product-specific flag. Do not change without direct instructions from Borland support personnel.
DATABASE NAME	The drive, path, and file name to access.
USER NAME	Default name for accessing the ODBC server.
ODBC DSN	The name of the ODBC data source to which this alias will connect. Must be the same as the ODBC data source you named when you created the ODBC driver connection.
OPEN MODE	Mode in which the ODBC driver connection opens the database. Can be READ/WRITE or READ ONLY. Default: READ/WRITE
LANGDRIVER	Language driver used to determine table sort order and character set.
SCHEMA CACHE SIZE	Number of SQL tables whose schema information will be cached. Can be any whole number from 0 to 32. Default: 8
SCHEMA CACHE DIR	Specifies the directory in which the local schema cache is stored. Used when ENABLE SCHEMA CACHE is TRUE to cache schema locally when tables reside on an SQL server.
SQLQRYMODE	Method for handling queries to SQL data. Can be NULL (blank setting), SERVER, or LOCAL. [more] Default: NULL
SQLPASSTHRU MODE	Specifies whether or not the BDE application will be able to access the SQL server via desktop queries and passthrough SQL queries in the same database alias connection. Can be NOT SHARED, SHARED AUTOCOMMIT, or SHARED NOAUTOCOMMIT. [more] Default: SHARED AUTOCOMMIT
TRACE MODE	A numeric value (bit mask) specifying how much trace information to log. The Windows OutputDebugString call is used to output the requested information to the debug window. The following table shows which

information is logged based on bit settings:

Bit Settings	Logged Information
0x0001	prepared query statement
0x0002	executed query statements
0x0004	vendor errors
0x0008	statement options (that is: allocate, free)
0x0010	connect / disconnect
0x0020	transaction
0x0040	BLOB I/O
0x0080	miscellaneous
0x0100	vendor calls

ENABLE SCHEMA CACHE — Specifies whether the BDE caches table schema locally for tables residing on SQL servers. This enhances performance for table opens. Set SCHEMA CACHE DIR to the directory in which the local cache is stored.

SCHEMA CACHE TIME — Specifies how long table list information will be cached. (In the BDE, table information is cached when you call either DbiOpenTableList or DbiOpenFileList.) Setting this value can increase performance for table and file list retrieval. Possible modes and their meanings are listed here.

Setting	Meaning
-1	The table list is cached until you close the database. (Default)
0	No table lists are cached.
1 through 2147483647	The table list is cached for the number of seconds specified in the setting.

Default: -1

BATCH COUNT — Specifies the number of modified records to be included in a batch before auto-committing. In this way you can adjust the size of a batch to accommodate server transaction logs that are not big enough to handle the whole batch. In the BDE, you can override this value by setting the database property, dbBATCHCOUNT. See Borland Database Engine Online Reference

Default: The number of records that can fit into 32 KB

MAX ROWS — Specifies maximum number of rows that the SQL driver will attempt to fetch for every SQL statement sent to the server. [more]

ROWSET SIZE — Specifies the number of rows to retrieve from the server in a single fetch, and the number of records to insert at a time when using DbiWriteBlock. This setting isn't supported by all ODBC drivers.

Default: 20 (20 records per server fetch, 20 records inserted at a a time).

ENABLE BCD — Specifies whether BDE translates numeric and decimal fields into floating point values or binary coded decimal (BCD) values. BCD values eliminate the rounding errors associated with floating point math (such as a 3 * (2/3) resulting in 2.00000000001). When ENABLE BCD is set to TRUE, DECIMAL and NUMERIC fields are converted to BCD for ODBC drivers.

BLOBS TO CACHE — Determines how many BLOBs will be cached on the client. Applications that deal with fetching dead BLOBs using dead table opens or queries

	can set a limit on the number of BLOBs to cache depending on the resource available on the client. Setting a value of 100 means the application can work with a maximum of 100 BLOB records cached. Fetching more than 100, then scrolling back 100 records results in an "Invalid Blob handle in record buffer" error message. This parameter does not apply to live table opens. Default Value: 64, Range : >64 and < 65536.
BLOB SIZE	Determines the fetch buffer size for dead BLOBs. Applications that deal with dead BLOBs using dead table opens or queries or batchmoves can set a maximum limit on the size of BLOBs to fetch. Setting this parameter to 64 means your application can fetch BLOBs of up to 64K. This parameter does not apply to live table opens. Default Value: 32, Range : >32 and <1000.

Sybase driver settings

If you have installed Borland SQL Links for Sybase, you can choose Sybase under Drivers in the left pane of the Configuration page in the BDE Administrator or can create or select a Sybase alias on the Databases page. The Sybase driver settings appear in the right pane. You cannot change those with **bold** labels.

For more information, see:

Connecting to Sybase

Sybase driver settings

Sybase driver setting jump

Oracle driver settings

If you have purchased and installed Borland SQL Links for Oracle, you can choose Oracle under Drivers in the left pane of the Configuration page in the BDE Administrator or can create or select an Oracle alias on the Databases page. The Oracle driver settings appear in the right pane. You cannot change those with **bold** labels.

For more information, see:

Connecting to Oracle

Oracle driver settings

Oracle driver setting jump

Informix driver settings

If you have purchased and installed Borland SQL Links for Informix, you can choose Informix under Drivers in the left pane of the Configuration page in the BDE Administrator or can create or select an Informix alias on the Databases page. The Informix driver settings appear in the right pane. You cannot change those with **bold** labels.

For more information, see:

Connecting to Informix

Informix driver settings

Informix driver setting jump

InterBase driver settings

If you have purchased and installed Borland SQL Links for InterBase, you can choose InterBase under Drivers in the left pane of the Configuration page in the BDE Administrator or can create or select an Interbase alias on the Databases page. The InterBase driver settings appear in the right pane. You cannot change those with **bold** labels.

For more information, see:

Connecting to InterBase

InterBase driver settings

InterBase driver setting jump

Microsoft SQL Server driver settings

If you have purchased and installed Borland SQL Links for Microsoft SQL Server, you can choose Microsoft SQL Server under Drivers in the left pane of the Configuration page in the BDE Administrator or can create or select an MSSQL alias on the Databases page. The Microsoft SQL Server driver settings appear in the right pane. You cannot change those with **bold** labels.

For more information, see:

Connecting to Microsoft SQL Server

Microsoft SQL Server driver settings

MS SQL driver setting jump

DB2 driver settings

If you have purchased and installed Borland SQL Links for DB2, you can choose DB2 under Drivers in the left pane of the Configuration page in the BDE Administrator or can create or select a DB2 alias on the Databases page. The DB2 driver settings appear in the right pane. You cannot change those with **bold** labels.

For more information, see:

Connecting to DB2

DB2 driver settings

DB2 driver setting jump

MAX ROWS

Specifies maximum number of rows that the SQL driver will attempt to fetch for *every* SQL statement sent to the server. This includes schema inquiry queries that the driver sends to the server during a table open to retrieve column, index, and valcheck information.

If a request is made for more than MAX ROWS, then an error is returned (DBIERR_ROWFETCHLIMIT). A return of DBIERR_ROWFETCHLIMIT is similar to DBIERR_EOF, except that it indicates a client-forced EOF when there actually may be more rows available on the server.

You can use the MAX ROWS option as a system governor to prevent users from unintentionally tying up valuable system resources. For example, a database administrator may set up users' configuration files to prevent them from tying up server and network resources if they happen to do a "SELECT * ..." on a huge table. You can set the MAX ROWS option make it impossible for a user to generate a million record query by mistake.

Be aware that if you set MAX ROWS too small, you may not be able to open a table under that database because it cannot get sufficient schema information. If MAX ROWS is not set to a large enough value to retrieve all the required metadata information during table open, then an error is returned and the table cannot be opened. MAX ROWS does not affect non-updateable queries in this way because a DESCRIBE (instead of a schema query) is used to get query column information.

Default:

-1 (No limit on fetching rows.)

Warning! A MAX ROW limitation could break existing BDE applications that fetch until receiving DBIERR_EOF. Such applications must be modified to handle a return of DBIERR_ROWFETCHLIMIT as well as DBIERR_EOF. Users should be able to "see" all rows that have already been fetched, but they should be notified that there may be additional rows on the server.

SQLQRYMODE settings

Setting	Meaning
NULL (blank setting)	(Default mode) Query goes first to the SQL server. If the server is unable to perform the query, it is performed at the Borland desktop.
SERVER	Query is sent to the SQL server. If the server is unable to perform the query, it fails.
LOCAL	Query is always performed at the desktop.

SQLPASSTHRU MODE settings

This parameter determines whether and how passthrough SQL and standard BDE calls share the same database connections. For transactions, this translates to whether passthrough transactions and other transactions "know" about each other.

Only applications that use passthrough SQL need be concerned with SQLPASSTHRUMODE. If you are developing an application to control transactions with passthrough SQL, you must set SQLPASSTHRU MODE to NOT SHARED. Otherwise passthrough SQL and the application's methods may interfere with each other, leading to unpredictable results.

Setting	Meaning
NOT SHARED (blank setting)	Passthrough SQL and non-passthrough SQL do *NOT* share the same database connection.
SHARED AUTOCOMMIT	Passthrough SQL and non-passthrough SQL will share the same connection, and (as long as you are not in an explicit client transaction or batch mode) passthrough SQL will be automatically committed. Each operation on a single row is committed. This mode most closely approximates desktop database behavior but it is inefficient on SQL servers because it starts and commits a new transaction for each row, resulting in a heavy load of network traffic.
SHARED NOAUTOCOMMIT	Passthrough SQL and non-passthrough SQL share the same connection, but passthrough statements will not be automatically committed. The application must explicitly start and commit transactions. This setting could result in conflicts in busy multi-user environments where many users are updating the same rows.

Paradox language drivers

Description

The following table shows the language drivers you can use for Paradox tables, along with the code page for each driver.

Note: Internal language driver names are case-sensitive.

Long name	Internal name	Character set	Collation sequence
Paradox 'ascii'	ascii	DOS CODE PAGE 437	Binary
Paradox 'hebrew'	hebrew	DOS CODE	Binary

		PAGE 862	
Paradox 'intl'	intl	DOS CODE PAGE 437	Multilingual Western Europe
Paradox 'intl' 850	intl850	DOS CODE PAGE 850	Brazilian Portuguese, French Canadian (2-level)
Paradox 'japan'	japan	CODE PAGE 932	Japanese (4-level)
Paradox 'nordan'	nordan	DOS CODE PAGE 865	Norwegian/Danish (Paradox 3.5, 2-level)
Paradox 'nordan40'	nordan40	DOS CODE PAGE 865	Norwegian/Danish (Paradox 4.0, 5.0, 5.5, 7.0, 2-level)
Paradox 'swedfin'	swedfin	DOS CODE PAGE 437	Swedish/Finnish (2-level)
Paradox 'turk'	turk	CODE PAGE 857	Turkish (2-level)
Paradox ANSI HEBREW	ANHEBREW	1255(ANSI)	Binary
Paradox China 936	china	CODE PAGE 936	China (1-level)
Paradox Cyrr 866	cyrr	DOS CODE PAGE 866	Cyrillic
Paradox Czech 852	czech	DOS CODE PAGE 852	Czech852 (2-level)
Paradox Czech 867	cskamen	DOS CODE PAGE 867	Czech867 (2-level)
Paradox ESP 437	SPANISH	DOS CODE PAGE 437	Spanish (3-level)
Paradox Greek GR437	grcp437	DOS CODE PAGE 737	Greek (2-level)
Paradox Hun 852 DC	hun852dc	DOS CODE PAGE 852	Hungarian (2-level)
Paradox ISL 861	iceland	DOS CODE PAGE 861	Icelandic (2-level)
Paradox Korea 949	korea	CODE PAGE 949	Korea (1-level)
Paradox Polish 852	polish	DOS CODE PAGE 852	Polish (2-level)
Paradox Slovene 852	slovene	DOS CODE PAGE 852	Slovene (2-level)
Paradox Taiwan 950	taiwan	DOS CODE PAGE 950	Taiwan (1-level)
Paradox Thai 874	thai	DOS CODE PAGE 874	Thai (3-level)
Pdox ANSI Cyrillic	ancyrr	1251 (ANSI)	Compatible with Paradox "cyrr" (2-level)

Pdox ANSI Czech	anczech	1250 (ANSI)	Compatible with Paradox "czech" (2-level)
Pdox ANSI Greek	angreek1	1253 (ANSI)	Compatible with Paradox "greek" (2-level)
Pdox ANSI Hun. DC	anhundc	1250 (ANSI)	Compatible with Paradox "hung" (2-level)
Pdox ANSI Intl	ANSIINTL	1252 (ANSI)	Compatible with Paradox "intl" (3-level)
Pdox ANSI Intl850	ANSII850	DOS CODE PAGE 850	Compatible with Paradox "intl850" (3-level)
Pdox ANSI Nordan4	ANSINOR4	1252 (ANSI)	Compatible with Paradox "nordan40" (2-level)
Pdox ANSI Polish	anpolish	1250(ANSI)	Compatible with Paradox "polish" (2-level)
Pdox ANSI Slovene	ansislov	1250(ANSI)	Compatible with Paradox "slovene" (2-level)
Pdox ANSI Spanish	ANSISPAN	1252(ANSI)	Compatible with Paradox "SPANISH" (3-level)
Pdox ANSI Swedfin	ANSISWFN	1252(ANSI)	Compatible with Paradox "swedfin" (3-level)
Pdox ANSI Turkish	ANTURK	1254(ANSI)	Compatible with Paradox "turk" (2-level)
pdx ANSI Czech 'CH'	anczechw	1250 (ANSI)	(2-level)
pdx Czech 852 'CH'	czechw	DOS CODE PAGE 852	(2-level)
pdx Czech 867 'CH'	cskamenw	DOS CODE PAGE 867	(2-level)
pdx ANSI ISO L_2 CZ	anil2czw	1250 (ANSI)	Paradox Czech, (2-level)
pdx ISO L_2 Czech	il2czw	ISO8859-2	Paradox Czech, ISO8859-2 (2-level)
Pdox ANSI Bulgarian	BGPD1251	1251 (ANSI)	Bulgarian (2-level)
Paradox Bulgaria 868	Bulgaria	DOS CODE PAGE 868	Bulgaria (2-level)

dBASE language drivers

Description

The following table shows the language drivers you can use for dBASE tables.

Note: Internal language driver names are case-sensitive**.**

Long name	Internal name	Character set	Collation sequence
'ascii' ANSI	DBWINUS0	Windows CODE PAGE 1252	Binary
'Spanish' ANSI	DBWINES0	Windows CODE PAGE 1252	Spanish (4-level)
'WEurope' ANSI	DBWINWE0	Windows CODE PAGE 1252	Multilingual Western Europe (4-level)
dBASE CHS cp936	DB936CN0	DOS CODE PAGE 936	dBASE Chinese936 (1-level)
dBASE CSY cp852	DB852CZ0	DOS CODE PAGE 852	dBASE Czech852 (2-level)
dBASE CSY cp867	DB867CZ0	DOS CODE PAGE 867	dBASE Czech867 (2-level)
dBASE DAN cp865	DB865DA0	DOS CODE PAGE 865	dBASE Danish (2-level)
dBASE DEU cp437	DB437DE0	DOS CODE PAGE 437	dBASE German (3-level)
dBASE DEU cp850	DB850DE0	DOS CODE PAGE 850	dBASE German850 (3-level)
dBASE ELL GR437	db437gr0	DOS CODE PAGE 439	dBASE Greek (2-level)
dBASE ENG cp437	DB437UK0	DOS CODE PAGE 437	dBASE English/UK (2-level)
dBASE ENG cp850	DB850UK0	DOS CODE PAGE 850	dBASE English850/UK (3-level)
dBASE ENU cp437	DB437US0	DOS CODE PAGE 437	Binary
dBASE ENU cp850	DB850US0	DOS CODE PAGE 850	Binary
dBASE ESP cp437	DB437ES1	DOS CODE PAGE 437	dBASE Spanish (2-level)
dBASE ESP cp850	DB850ES0	DOS CODE PAGE 850	dBASE Spanish850 (3-level)
dBASE FIN cp437	DB437FI0	DOS CODE PAGE 437	dBASE Finnish (2-level)
dBASE FRA cp437	DB437FR0	DOS CODE PAGE 437	dBASE French (2-level)
dBASE FRA cp850	DB850FR0	DOS CODE PAGE 850	dBASE French850 (3-level)
dBASE FRC cp850	DB850CF0	DOS CODE PAGE 850	dBASE Canadian-French850 (2-level)
dBASE FRC cp863	DB863CF1	DOS CODE	dBASE Canadian-

		PAGE 863	French863 (2-level)
dBASE HUN cp852	db852hdc	DOS CODE PAGE 852	dBASE Hungarian (1-level)
dBASE ITA cp437	DB437IT0	DOS CODE PAGE 437	dBASE Italian (2-level)
dBASE ITA cp850	DB850IT1	DOS CODE PAGE 850	dBASE Italian850 (3-level)
dBASE JPN Dic932	DB932JP1	CODE PAGE 932	dBASE Japan Dic932 (5-level)
dBASE JPN cp932	DB932JP0	DOS CODE PAGE 932	Binary
dBASE KOR cp949	DB949KO0	DOS CODE PAGE 949	dBASE Korea949 (1-level)
dBASE NLD cp437	DB437NL0	DOS CODE PAGE 437	dBASE Dutch (2-level)
dBASE NLD cp850	DB850NL0	DOS CODE PAGE 850	dBASE Dutch850 (3-level)
dBASE NOR cp865	DB865NO0	DOS CODE PAGE 865	dBASE Norwegian (2-level)
dBASE PLK cp852	db852po0	DOS CODE PAGE 852	dBASE Polish852 (2-level)
dBASE PTB cp850	DB850PT0	DOS CODE PAGE 850	dBASE Brazilian Portuguese 850 (2-level)
dBASE PTG cp860	DB860PT0	DOS CODE PAGE 860	dBASE Brazilian Portuguese 860 (2-level)
dBASE RUS cp866	db866ru0	DOS CODE PAGE 866	Binary
dBASE SLO cp852	db852sl0	DOS CODE PAGE 852	Slovenian (2-level)
dBASE SVE cp437	DB437SV0	DOS CODE PAGE 437	dBASE Swedish (2-level)
dBASE SVE cp850	DB850SV1	DOS CODE PAGE 850	dBASE Swedish850 (3-level)
dBASE CHT cp950	DB950TW0	DOS CODE PAGE 950	dBASE Taiwan950 (1-level)
dBASE THA cp874	db874th0	DOS CODE PAGE 874	dBASE Thai (3-level)
dBASE TRK cp857	DB857TR0	DOS CODE PAGE 857	dBASE Turkish (2-level)
Hebrew dBASE	dbHebrew	DOS CODE PAGE 862	Binary
DBASE BUL 868	Bgdb868	DOS CODE PAGE 868	Bulgaria (2-level)

ODBC driver connection

A connection from your BDE application to an ODBC driver. The connection requires your BDE

application, a vendor-supplied ODBC driver, and a BDE alias on the workstation side; an ODBC data source on the server side.

Once you create an ODBC driver connection, it appears on the list of available drivers on the Configuration page of the BDE Administrator. This lets you set up an alias for the target ODBC data source and connect to it through your BDE application.