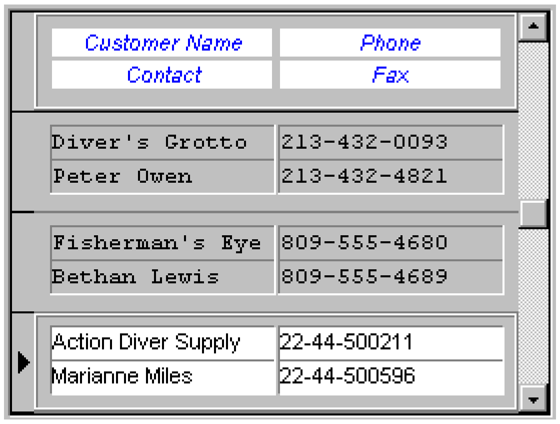
TtaDBMRO Documentation
Version 2.00
05/06/96

A Data Aware Multiple Record Object

Introduction
Tired of TDBGrids that cannot display all the fields you'd like without endlessly scrolling horizontally? Wish you had a grid where each record could occupy multiple lines, contain any Borland field data aware control, use different fonts and colors? Perhaps you'd like to put some pizzazz in the title? Maybe even differentiate the current record from the other visible records? Or possibly you've been frustrated by the lack of flexibility of the TDBCtrlGrid?

Welcome to the TtaDBMRO! This Delphi component provides Multiple Record Object (MRO) capability for database applications. Simply add a TTable, TDataSource, TtaDBMRO, and a TPanel that contains data aware controls. That's it! The contents of the TPanel are stacked vertically one above the other.



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Diver's Grotto	213-432-0093
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TtaDBMRO provides the following features:

- Uses a TPanel that contains field data aware controls
- Can automatically manage the height and width of the MRO
- Supports user defined titles
- Provides numerous event hooks to allow for customisation
- Supports all Borland field data aware controls
- Supports controls that are TDBCtrlGrid compatible (Delphi 2.0 only)
- Compatible with InfoPower from Woll2Woll Software
- Compatible with Orpheus from TurboPower
- Supports Delphi 1.0 and 2.0

Installation
To install TtaDBMRO into the component palette:

1. Create a new directory (e.g. d:\TADBMRO)
2. UnZip the files in the new directory
3. (Trial run users only) If using Delphi 1.0, rename TADBMRO.D16 to TADBMRO.DCU. If using Delphi 2.0, rename TADBMRO.D32 to TADBMRO.DCU.
4. (Optional - registered users only) Using a text editor, modify TADBMRO.INC per the instructions contained within TADBMRO.INC. This should only be done by those wishing to use InfoPower's TwwDBGrid as the ancestor to TtaDBMRO (otherwise the ancestor is TDBGrid) or users wishing to enable Orpheus and/or Out & About support.
5. (Recommended) Backup COMPLIB.DCL
6. Start Delphi, select Options|Install Components (Delphi 1.0) or Components|Install (Delphi 2.0).
7. Click the Add button, then the Browse button and locate MROREG.PAS in your new

directory

8. Select it
9. Press OK in the Install Components dialog and wait for the Library to rebuild
10. (Trial run users) Programs can now use TtaDBMRO while Delphi is running

TtaDBMRO is now available in the Data Controls palette.

To install the on-line help:

1. TADBMRO.HLP and TADBMRO.KWF should be in the same directory as TADBMRO.DCU
2. If Delphi is running, shut it down
3. (Recommended) Backup \DELPHI\BIN\DELPHI.HDX
4. Run \DELPHI\HELP\HELPINST
5. File|Open \DELPHI\BIN\DELPHI.HDX
6. If any existing KWF files are "not found", then add the appropriate search paths by selecting Options|Search Path
7. Select Keywords|Add File menu choice and select d:\TADBMRO\TADBMRO.KWF
8. File|Save
9. Exit the program
10. Check the WINHELP.INI file in the Windows directory and be sure that this entry is included: `taDBMRO.hlp=<fullpath>` where <fullpath> indicates the location of the help file

The taDBMRO help files are now installed.

TtaDBMRO Component

The *TtaDBMRO* component is a descendant of *TDBGrid* (or *TwwDBGrid*) that provides Multiple Record Object capability by accessing data in a database table or query and displaying it in format defined by a *TPanel*. This format is duplicated vertically so that the contents of the *TPanel* appear to be stacked one above the other.

TtaDBMRO inherits most of the properties of *TDBGrid* without modification expect for *DefaultDrawing*, *Options*, and *TabStop*.

RecordPanel defines the layout of the record displayed. For the selected record or row, all editing occurs in the *RecordPanel*.

TtaDBMRO supports all standard Borland field data aware controls plus drawing tools such as *TBevel*, *TLabel*, and *TGroupBox*. Registered users have access to controls from InfoPower, TurboPower, and Out & About (see Supported Controls). Several hooks are provided for supporting new controls.

Titles may be displayed by using the *TitlePanel* property. By using the *AutoTitleHeight* property, the application can control whether to force the height of titles to be the same as the height of the *RecordPanel*.

The *ClientHeight* of the *TtaDBMRO* can be set to an exact multiple of the *RecordPanel*.*Height* by using the *AutoHeight* property. The *AutoWidth* property is a closely related attribute.

There are several options available to differentiate the appearance of the selected record or row from the nonselected record or row. The *UseColor* and *UseFont* properties simply use the *Color* and *Font* properties of the *TtaDBMRO* to draw the text fields when displaying nonselected records. The *BackgroundColor* property changes the panel color of the nonselected records.

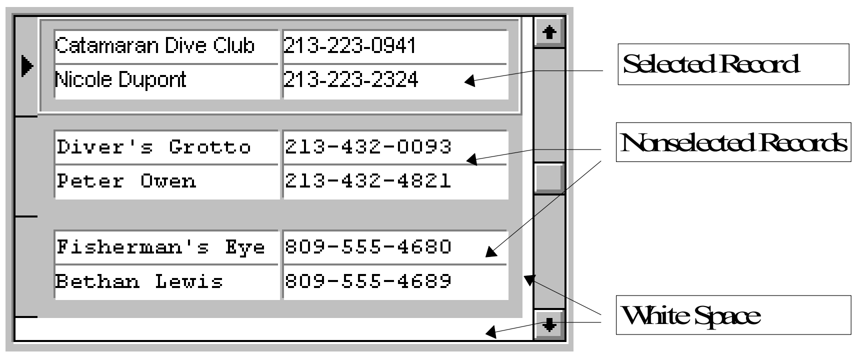
Navigation within the object requires that some code be added to the parent form and, optionally, to the first and last field in the *RecordPanel*.

For step by step instructions, see How to Create a MRO.

If you are using the Trial Run version of *TtaDBMRO*, the component will only run while Delphi is running. To register your copy of *TtaDBMRO*, see How to Order.

Definitions

Selected Record
This is the current or focused record in the MRO. Only one record at a time can be the selected record.



Catamaran Dive Club	213-223-0941
Nicole Dupont	213-223-2324
Diver's Grotto	213-432-0093
Peter Owen	213-432-4821
Fisherman's Eye	809-555-4680
Bethan Lewis	809-555-4689

Nonselected Record
All other visible records other than the selected record.

White Space
The difference between the height and width of the *RecordPanel* and the *ClientHeight* and *ClientWidth* of the MRO sometimes produces a gap between the bottom and/or right edges of the *RecordPanel* and the bottom and/or right edge of the MRO. Although not necessarily white, this gap is called white space. See figure in selected record. To manage white space, see *AutoHeight* and *AutoWidth*.

Demo Programs

All the demos assume that an alias DBDEMOS exists and that BIOLIFE.DB, CUSTOMER.DB, EMPLOYEE.DB, ORDERS.DB, and related files are contained within this alias. If this is not the case, this alias and/or table will have to be re-installed.

All projects/units ending in a numeral are designed to work with *TtaDBMRO* descending from TDBGrid (e.g. MROPROJ1.DPR). Those ending in a letter are designed to work with *TtaDBMRO* descending from TwwDBGrid (e.g. MROPROJA.DPR). Since this documentation will only refer to demo projects ending with a numeral, registered users using TwwDBGrid version should simply substitute the equivalent demo ending with a letter.

MROPROJ1.DPR demonstrates all the major features of *TtaDBMRO*. Click on the check boxes to toggle the various features.

MROPROJ2.DPR is an example of how to support a new control.

How to Create a MRO

1. Create a new project.
2. Add a TTable and TDataSource to the form and connect them as usual to a table of your choice.
3. Select a *TPanel* component and add it to the form.
4. Within Panel1, place all the elements of the record you wish displayed using any standard Borland field data aware control, *TLabel*, *TBevel*, *TPanel*, and/or *TGroupBox*.
5. Select the *TtaDBMRO* component from the Data Control palette and add it to the form.
6. Set the *Width* of taDBMRO1 to the same width of Panel1 (can be approximate).
7. Set the *Height* of taDBMRO1 to a multiple of the height of Panel1 (can be approximate). So if the height of the panel is 80, set the height of the taDBMRO to 240.
8. Set taDBMRO1.*DataSource* to DataSource1.
9. Set taDBMRO1.*RecordPanel* to Panel1.
10. Set Form1.*KeyPreview* to *True*.
11. Add the following *OnKeyDown* event to Form1, then run the project:

```
procedure TForm1.FormKeyDown(Sender: TObject; var Key: Word;
                             Shift: TShiftState);
begin
 taDBMRO1.FormKeyDown(ActiveControl,Key,Shift)
end;
```

How TtaDBMRO Works

TtaDBMRO descends from *TDBGrid* (or *TwwDBGrid*) and therefore relies on *TDBGrid* to manage the connection to the data aware controls. In terms of drawing the screen, *TtaDBMRO* ensures that the *DataSource* has one visible field, but instead of drawing just the text of this single field, it expands the size of the cell to fit the *RecordPanel* and then positions the *RecordPanel* over the cell. This is how the selected record or row is 'drawn'.

Nonselected records or rows are drawn differently. Instead of duplicating the *RecordPanel* (and the controls within the *RecordPanel*) for the remaining visible rows in the 'grid', *TtaDBMRO* creates a bitmap image of them. In this way, no additional Windows resources are consumed. However, in order to create this image, *TtaDBMRO* must know how to draw the image of each control within the *RecordPanel*. For a list of supported controls, see Supported Controls. Also see Controlling EXE File Size.

TtaDBMRO takes steps to assure that there is only one visible field in the *DataSource*. Nevertheless, the application should not change the *Visible*, *DisplayWidth*, or *DisplayLabel* property of any of the fields in the *DataSource* at run time.

In order for keystrokes such as Up, Down, PgUp, PgDn, Ctrl+Home, and Ctrl+End to be translated into the appropriate navigation sequences, some code has to be added to the form and, optionally, to the first and last field or control in the *RecordPanel*. See Navigation for a complete discussion on how this is implemented.

Supported Controls

TtaDBMRO supports all Borland field data aware controls and their descendants: *TDBEdit*, *TDBText*, *TDBComboBox*, *TDBListBox*, *TDBLookupList*, *TDBLookupListBox, TDBLookupCombo*, *TDBLookupComboBox, TDBCheckBox*, *TDBRadioGroup*, *TDBMemo*, and *TDBImage*. In addition, the following drawing tools are supported: *TBevel*, *TLabel*, *TGroupBox*, and *TPanel*. Registered users have access to *TwwDBLookupCombo*, *TwwDBLookupComboDlg*, *TwwDBComboBox* (InfoPower), *TDBComboBoxPlus*, *TDBLookupComboPlus* (Out & About), *OvcDBSimpleField*, *OvcDBPictureField*, and *OvcDBNumericField* (TurboPower's Orpheus) controls. To use controls that are not descendants of these controls, see Supporting New

Controls.

Trial run versions of many of these tools are available from:

	CompuServe Library	**Internet**
TurboPower	pcvenb, Lib 6, orphtr.exe	http://tpower.com
InfoPower	Delphi, Lib 22, infotrl.exe	http://woll2woll.com
Out & About	Delphi, Lib 6 & 22, dbplus1.zip & dbplus2.zip	http://www.computer-shopper.com/magazine/delphi.htm

TtaDBMRO also supports controls that are *TDBCtrlGrid* compatible. This support is limited to Delphi 2.0 and the *UseColor* and *UseFont* properties will have no affect on these controls.

BLOB Controls

Support for BLOB controls (*TDBMemo* and *TDBImage*) was added in version 1.10 There is one limitation to using BLOB controls: when inserting or appending a new record, all BLOB fields in the MRO become blank. After the record is posted, the BLOB fields display normally. This behavior is probably why Borland chose not to support these field types in TDBCtrlGrid.

The following work around is recommended: place this code in the Table1 *AfterInsert* event:

```
procedure TForm1.Table1AfterInsert(DataSet: TDataset);
begin
DataSet.Post;
DataSet.Edit
end;
```

Be aware that this work around has two side affects: first, since the record is posted, the record moves to its index position in the table, so you may want to set a temporary index value, if possible, to keep the record in the same relative position (usually at the end of the table).

Second, if the user moves off the record without entering any data, the record is not automatically canceled, so you will need to delete it. This can be overcome by adding this *OnBeforePost* event to Table1:

```
procedure TForm1.Table1BeforePost(DataSet: TDataset);
var i : Integer;
begin
with DataSet do
 if State = dsEdit then
  begin
   {* This example checks each field, which may not always *}
   {* be appropriate                                       *}
   for i := 0 to FieldCount - 1 do
    if not Fields[i].IsNull then exit;
   Delete;
   Abort
  end
end;
```

Unfortunately, this event is only called if the record has been modified, so if the user accidentally inserts a new record and immediately moves off the record, then this code is not executed. Therefore, some code has to be added to Table1AfterInsert after DataSet.Edit to modify a field and then clear the field. This will force the Table1.*Modifed* property to be True, and thus ensure that the above event is called. See example in MROPROJ1.

Navigation

TtaDBMRO provides two styles of keyboard navigation between the selected record and adjacent nonselected records. These styles can be used individually or in combination.

Conventional Grid Navigation

The first style is conventional grid navigation where Up, Down, PgUp, PgDn, Ctrl+Home, and Ctrl+End have their usual meaning. Since the *RecordPanel* always has the keyboard focus, a means has to be provided to intercept these keystrokes and translate them into appropriate navigation sequences. To do this, set the form's *KeyPreview* property to *True* and add the following code:

```
procedure TForm1.FormKeyDown(Sender: TObject; var Key: Word;
                             Shift: TShiftState);
begin
taDBMRO1.FormKeyDown(ActiveControl,Key,Shift)
end;
```

If *ActiveControl* is part of the *RecordPanel* and Key/Shift are either Up, Down, PgUp, PgDn, Ctrl+Home, or Ctrl+End, then the routine will perform the navigation and set Key to zero. If the user is on the last record, *dgEditing* is enabled, and the table is not *ReadOnly*, the down arrow key will Append a new record.

If there are multiple *TtaDBMRO*s in the form, then *FormKeyDown* will have to be called for each *TtaDBMRO*.

This form of navigation is best used when none of the controls in the *RecordPanel* use the Up or Down keys. Controls that use these keys, which include *TDBComboBox*, *TDBListBox*, *TDBLookupList*, *TDBLookupCombo*, and *TDBRadioGroup*, will not receive the Up and Down keystrokes if *FormKeyDown* is used, so you may want to screen for these controls before calling *FormKeyDown*. Alternatively, you may call *FormKeyDownExt* which automatically screens for these controls.

Tabbing Between Records

The second style is where tabbing from the last control in the *RecordPanel* advances to the next record and gives the first control in the *RecordPanel* the focus (and visa versa). In order to implement this behavior, four routines have to be added to the form.

In the first and the last controls in the *RecordPanel*, place the following code in the fields' OnExit routine:

```
taDBMRO1.FieldOnExit(ActiveControl,TestControl,GotoControl,GotoNext)
```

where: *ActiveControl* is the ActiveControl; *TestControl* is the next (or prior) control in natural tab order; *GotoControl* is the control to go to instead of the *TestControl;* and *GotoNext* is a Boolean which indicates the direction to move the *RecordPanel.*

If taDBMRO1 and the *RecordPanel* (and those controls contained within the *RecordPanel*) are the only controls in the form, then *TestControl* and *GotoControl* are the same.

If your form contains *TGroupBoxes* or *TPanels* (other than the *RecordPanel* or *TitlePanel*) , then *TestControl* may be a TGroupBox or TPanel even though these objects aren't normally associated with getting the focus.

The following code is from MROUNIT1.PAS (part of MROPROJ1.DPR):

```
procedure TForm1.DBEdit1Exit(Sender: TObject);
begin
```

```
taDBMRO1.FieldOnExit(ActiveControl,UseFontCheckBox,DBEdit11,FALSE)
end;
```

When DBEdit1 has the focus, a backtab would normally move the focus to UseFontCheckBox. Instead, this routine will move the focus to DBEdit11 (the last control in the *RecordPanel*) and move to the previous record (*GotoNext* is *False*).

```
procedure TForm1.DBEdit11Exit(Sender: TObject);
begin
taDBMRO1.FieldOnExit(ActiveControl,IndicatorCheckBox,DBEdit1,TRUE)
end;
```

When DBEdit11 has the focus, a tab would normally move the focus to IndicatorCheckBox. Instead, this routine will move the focus to DBEdit1 (the first control in the *RecordPanel*) and move to the next record (*GotoNext* is *True*).

Next, two routines have to be modified in the form. This code goes in the form's declaration:

```
private
 procedure WMParentNotify(var Msg : TWMParentNotify);
                  message WM_PARENTNOTIFY;
protected
 procedure ActiveChanged; override;
```

And this code implements the routines:

```
procedure TForm1.WMParentNotify(var Msg : TWMParentNotify);
begin
taDBMRO1.MonitorFocus(Msg.Event);
inherited
end;

procedure TForm1.ActiveChanged;
begin
taDBMRO1.MonitorFocus(WM_SETFOCUS);
inherited ActiveChanged
end;
```

MonitorFocus simply looks for WM_LBUTTONDOWN events and ignores the subsequent focus change. Why? Because the focus changes due to mouse clicks cannot be confused for Tab or BackTab, and this code keeps track of which is which.

Cursor Navigation

Clicking on a nonselected record automatically gives that record the focus. Clicking on a control in a nonselected record makes that record the selected record and gives the control the focus. However, this does not move the caret into an edit field (in the case of a TDBEdit, for example) or, if a TDBLookupCombo's drop down arrow was clicked, does it drop down the list. A few more things are needed to do this.

In order to move the caret into the field, drop down a list, or click on a scroll bar, TtaDBMRO uses the original click to move to the selected recorded, find the control (if any), and saves the mouse coordinates. Since it is in the middle for a WM_LMOUSEDOWN and WM_LMOUSEUP sequence, it cannot initiate another mouse press. It has to wait until the original mouse sequence has competed.

The second 'mouse press' is initiated in the *Application.OnIdle* event. To do this, when *mroMouseClick* is *True* in *Flags*, taDBMRO temporarily inserts itself into the *OnIdle* event loop, processes the second 'mouse press', and removes itself from the *OnIdle* event loop (restoring the previous *OnIdle* event, if any). There is nothing further the application needs to do.

If you want to explicitly control the behavior of the *OnIdle* event and if *mroMouseClick* is *False* in *Flags*, then following code needs to be added to Form1's *OnCreate* event:

```
procedure TForm1.FormCreate(Sender: TObject);
begin
Application.OnIdle := taDBMRO1.ApplicationIdle
end;
```

If there is more than one *TtaDBMRO* in the application, then each instance of *TtaDBMRO* would have to be called.

Changing the Background Color for Nonselected Records

Using a different background color is one way to distinguish the nonselected records from the selected one. To use a different background color, simply set the *BackgroundColor* to the appropriate color.

If further customization is needed, use the *OnDrawBackground* event. The following example only changes the background color (a result more easily achieved as described above) and does not draw any of the elements of a TPanel (i.e. BevelInner, BevelOuter):

```
procedure TForm1.taDBMRO1DrawBackground(Sender: TObject;
                  Control: TControl; const CellRect: TRect);
begin
with taDBMRO1.Canvas do
 begin
  Brush.Color := clGreen;
  FillRect(CellRect)
 end
end;
```

Controlling the Colors and Fonts of Nonselected Records

By default, *UseColor* and *UseFont* are both *True* which forces the use of the *Color* and *Font* attributes when drawing nonselected records. Thus, the easiest way to display the nonselected records with a different field color and/or font is to change the *Color* and *Font* properties. These properties will be applied to each field in the nonselected records.

To use the same color(s) and font(s) in the nonselected record as the selected record, simply set *UseColor* and *UseFont* both to *False*. When *UseColor* is *False*, the *Color* of the control in the *RecordPanel* is used when drawing each field in the nonselected record. Similarly, if *UseFont* is *False*, then the *Font* from the control in the *RecordPanel* is used.

Controlling White Space

The difference between the height and width of the *RecordPanel* and the *ClientHeight* and *ClientWidth* of the MRO sometimes produces a gap between the bottom and /or right edges of the *RecordPanel* and the bottom and/or right edge of the MRO. Although not necessarily white, this gap is called white space.

There are three ways to control white space: First, simply leave the *AutoHeight* and *AutoWidth* properties set to their default settings of *True*. When set, these properties will automatically manage the size to the *TtaDBMRO* so that there will be no white space.

Second, you may adjust the size of the *TtaDBMRO* manually to eliminate white space. Note, however, that if you allow the user to toggle certain *TtaDBMRO* attributes such as *dgTitles*, *dgRowLines*, and *dgIndicator*, that these actions may introduce white space into the object (*AutoHeight* and *AutoWidth* can manage the toggling of these attributes).

Third, the color of the *TtaDBMRO* can be chosen to disguise the white space. If the color of the *RecordPanel* is *clBtnFace*, and the background of the nonselected records is *clBtnFace* (same as the *RecordPanel* which is the default), then simply set the color of the *TtaDBMRO* to *clBtnFace*.

Supporting New Controls

Before trying to support a new control, be sure to first check to see whether the control in question is a descendant of a supported control. If so, then nothing further needs to be done. If it is not a descendant of a supported control, then custom support will have to be provided.

The following example shows how to support *TDBComboBox* by using the *OnDrawControl* event. This control already has native *TtaDBMRO* support, but is used in the example below and in MROPROJ2.DPR because to use a non-standard control would assume that the non-standard control is installed on your computer.

```
procedure TForm1.taDBMRO1DrawControl(Sender: TObject;
            Control: TControl; const CellRect: TRect);
var  S : string;
    Rect : TRect;
    DrawFont : TFont;
    Offset : Integer;
begin
if Control is TDBComboBox then
 with TDBComboBox(Control) do
  begin
   if not Visible then exit;
   S := '';
   if DataSource <> nil then
    try
     S := DataSource.DataSet.FieldByName(DataField).DisplayText;
    except
     on EDatabaseError do
     else raise
    end;
   Rect     := CalcRect(Control,CellRect);
   {$IFDEF WIN32}
   if NewStyleControls then InflateRect(Rect,-1,-1);
   {$ENDIF}
   DrawFont := taDBMRO1.FetchFont(Font);
   Offset   := taDBMRO1.GetFontOffset(DrawFont);
   taDBMRO1.DrawString(taLeftJustify,taDBMRO1.FetchColor(Color),
                     Enabled,DrawFont,Offset,Offset,Rect,S);
   taDBMRO1.DrawBorder(bsSingle,Ctl3D,True,Rect)
  end
else taDBMRO1.DrawControl(Control,CellRect)
end;
```

The parameters passed to the procedure are: *Sender*, the *TtaDBMRO*; *Control*, the control within the *RecordPanel* being drawn; and *CellRect*, the dimensions of the cell being drawn (this is the area occupied by the *RecordPanel*, not the *Control* within the *RecordPanel*).

The procedure is responsible for drawing for each control within the *RecordPanel*. So after the procedure has added support for the new control it should call *DrawControl* which will handle the drawing of all supported controls.

Controls added this way will not be visible in design mode.

If the new control itself contains controls (e.g. a *TPanel* may contain more than one *TDBEdit*), then the routine must call *DrawControl* for each child control. See the code used in *DrawPanel*.

See MROPROJ2.DPR. Note that the control will be visible in design mode because the control being supported in this example has native *TtaDBMRO* support.

InfoPower Support

By default, *TtaDBMRO* is a descendant of *TDBGrid* and installs itself in the 'Data Controls' palette. To make *TtaDBMRO* a descendant of *TwwDBGrid*, simply open the file TADBMRO.INC and make the changes to the conditional compiler directives as described in TADBMRO.INC. If you have already installed *TtaDBMRO* into the Delphi library, you will need to remove it (Options| Install Components, select Mroreg, and then press Remove). Now simply install (or reinstall) it, following the steps in described in the Installation section. *TtaDBMRO* will now be part of the InfoPower palette.

When InfoPower support is enabled, the *DataSource* and *Options* properties become their InfoPower equivalents, *TwwDataSource* and *TwwDBGridOptions*. Support will also be enabled for *TwwDBLookupCombo* and *TwwDBLookupComboDlg* (since *TwwDBComboBox* descends from *TDBComboBox*, this control is already supported).

Orpheus Support

To enable support for *OvcDBSimpleField*, *OvcDBPictureField*, and *OvcDBNumericField* controls, simply enable the appropriate *UseOvcDBXxxxField* compiler directive(s) in TADBMRO.INC (instructions on how to do this are contained in the file TADBMRO.INC).

By default, *taDBMRO* supports version 2.0x of Orpheus. If you wish to use version 1.0x, see the discussion below.

Be aware there can be key conflicts between *FormKeyDown* and OvcController1. If you find that the Up and Down keys not only move to the Prior/Next record but also change the focused field, then you will need to clear the command assignments for the Up and Down keys in the *EntryCommand* property of OvcController1.

Orpheus v1.0x Issues

In order to enable support for Orpheus version 1.0x, the compiler directive UseOrpheus2 must be disabled in TADBMRO.INC.

There are four things to be aware of when using Orpheus 1.0x controls: First, the application cannot use the *Tag* field of any Orpheus control in the *RecordPanel*. *TtaDBMRO* uses the *Tag* field internally. Any attempt by the application to use the *Tag* field will result in a General Protection Fault.

Second, in design mode, the nonselected records will be displayed without using the *PictureMask* for formatting.

These restrictions are entirely due to the fact that the current version (1.02 as of this writing) of Orpheus provides no direct way to apply a *PictureMask* to a string (future versions may support this). Therefore, in order to duplicate the formatting behavior of an *OvcDBXxxxField*, *TtaDBMRO* has to create a non-visible *OvcXxxxField* for each *OvcDBXxxxField* (the Tag field points to the *OvcXxxxField*). Creating the *OvcXxxxField*s while in design mode, while possible, was not deemed worth the added complexity and was potentially confusing (the *OvcXxxxField*s are visible in design mode).

Third, Orpheus version 1.01 and earlier has a bug in *OvcDBSimpleField* that prevents the *PictureMask* from being applied to the field. So if the *PictureMask* is '!' (forces upper case), the contents of the field are 'Smith', an *OvcDBSimpleField* will display 'Smith' while the corresponding field in the nonselected record will display 'SMITH'. Orpheus version 1.02 fixes this problem.

Out & About Support

To enable support for Out & About's *TDBComboBoxPlus* and *TDBLookupComboPlus* components, follow the instructions in the file TADBMRO.INC. If you are using *TDBLookupComboPlus* and *TDBLookupList* in the same application, be sure that the unit DBLookup appears after DBLUP2 in the USES clause.

TtaDBMRO 2.0 or later requires version 4.0 or later of *TDBLookupComboPlus* and version 2.0 or later of *TDBComboBoxPlus*.

Reference Section

ApplicationIdle procedure

Declaration

```
procedure ApplicationIdle(Sender: TObject; var Done: Boolean);
```

This procedure is automatically inserted into the *Application*.*OnIdle* event loop when *mroMouseClick* is *True* in *Flags*. If *mroMouseClick* is *False*, then place this procedure in the *OnIdle* event of *Application* in order to fully implement mouse support within nonselected records.

See also

Navigation

Example 1 -- One form, one TtaDBMRO, mroMouseClick is False:

```
procedure TForm1.FormCreate(Sender: TObject);
begin
Application.OnIdle := taDBMRO1.ApplicationIdle
end;
```

Example 2 -- One form, two TtaDBMROs, mroMouseClick is False in both TtaMROs:

```
private
{ Private declarations }
procedure DoIdle(Sender: TObject; var Done : Boolean);

procedure TForm1.DoIdle(Sender: TObject; var Done: Boolean);
begin
taDBMRO1.ApplicationIdle(Sender,Done);
taDBMRO2.ApplicationIdle(Sender,Done)
end;

procedure TForm1.FormCreate(Sender: TObject);
begin
Application.OnIdle := Form1.DoIdle
end;
```

AutoHeight property

Declaration

```
property AutoHeight: Boolean;
```

Use this property to automatically adjust the *ClientHeight* of the *TtaDBMRO* to be a multiple of the *RecordPanel*'s height. If *False*, there can be white space at the bottom edge of the *TtaDBMRO*. This property is ignored if *Align* is *alClient*, *alLeft*, or *alRight*.

The default value of *AutoHeight* is *True*.

See also
AutoWidth property

AutoTitleHeight property
Declaration
```
property AutoTitleHeight: Boolean;
```

When *True*, this property forces *TitlePanel.Height* to be equal to *RecordPanel*.*Height*. When *False*, *TtaDBMRO* uses the *TitlePanel*.*Height* without adjustment. Set to *False* if you wish to have a *TitlePanel* that is shorter (or taller) than that of the *RecordPanel*.

If set at run time, be sure to set *AutoTitleHeight* before setting the *TitlePanel* property.

If the application allows the user to enable and disable the title, and *AutoTitleHeight* is *False*, and *TitlePanel*.*Height* <> *RecordPanel*.*Height*, then the application will have to adjust the *Height* of the *TtaDBMRO* so that it does not shrink each time the title is enabled.

The default value of *AutoTitleHeight* is *True.*

AutoWidth property
Declaration
```
property AutoWidth: Boolean;
```

The *Width* of the *RecordPanel* is automatically adjusted to fit inside the *ClientWidth* of the *TtaDBMRO*. However, *TDBGrid* rounds the drawing area of a cell (and hence the *RecordPanel*) to multiples of 8 pixels (this is somewhat of an oversimplification). This means there can be a gap of up to 7 pixels on the right edge of the *TtaDBMRO*.

Use this property to automatically adjust the *ClientWidth* of the *TtaDBMRO* to eliminate this gap. If *False*, there can be white space at the right edge of the *TtaDBMRO*. This property is ignored if *Align* is *alClient*, *alTop*, or *alBottom*.

The default value of *AutoWidth* is *True.*

See also
AutoHeight property

BackgroundColor property
Declaration
```
property BackgroundColor: TColor;
```

This property controls the background color for the nonselected records.

The default value of *BackgroundColor* is *clBtnFace*.

See also
Controlling the Background Color of Nonselected Records

CalcRect function

Declaration
```
function CalcRect(Control: TControl; const CellRect: TRect): TRect;
```

A function usually called within a drawing routine to calculate the coordinates of the *Control* within the *CellRect*.

See also
Supporting New Controls

DefaultDrawing property
Declaration
```
property DefaultDrawing: Boolean;
```

This property is set to *False* by *TtaDBMRO* and should remain *False* in order for the object to behave properly.

The default value of *DefaultDrawing* is *False.*

Dither95 constant
This variable became private in v1.11.

DrawBorder procedure
Declaration
```
procedure DrawBorder(Style: BorderStyle; Ctl3D,TwoTone: Boolean;
                    const CellRect: TRect); virtual;
```

A virtual procedure used within *TtaDBMRO* to draw the border of the Control in the nonselected records.

See also
Supporting New Controls,
DrawString procedure, *OnDrawControl* event

DrawControl procedure
Declaration
```
procedure DrawControl(Control: TControl; const CellRect: TRect);
virtual;
```

Control is the *TControl* being drawn. *CellRect* is the area occupied by the *RecordPanel*, not the *Control* within the *RecordPanel*. See Supported Controls for a list of valid controls.

See also
Supporting New Controls, *DrawBorder* procedure, *OnDrawControl* event

DrawString procedure
Declaration
```
procedure DrawString(Alignment: TAlignment ; Color: TColor;
      Enabled: Boolean; Font: TFont; OffsetX,OffsetY: Integer;
      Rect: TRect; const Text: string); virtual;
```

A virtual procedure used within *TtaDBMRO* to draw the text of a control in the nonselected records.

See also
Supporting New Controls, *DrawBorder* procedure, *GetFontOffset* function, *FetchColor* function, *FetchFont* procedure, *OnDrawControl* event

GetFontOffset procedure
Declaration
```
procedure GetFontOffset(AFont: TFont): Integer;
```

Returns the *Offset* parameter used by *DrawString* to position text within the drawing region.

See also
Supporting New Controls, *FetchFont* function

FetchColor function
Declaration
```
function FetchColor(Value: TColor): TColor;
```

If *UseColor* is *False*, returns *Value*, else returns *TtaDBMRO.Color*.

See also
FetchFont function, Supporting New Controls

FetchFont function
Declaration
```
function FetchFont(Value: TFont): TFont;
```

If *UseFont* is *False*, returns *Value*, else returns *TtaDBMRO.Font*.

See also
FetchColor function, Supporting New Controls

FieldOnExit procedure
Declaration
```
procedure FieldOnExit(ActiveControl,TestControl,GotoControl:
                              TWinControl; GotoNext: Boolean);
```

This routine, when used in conjunction with *MonitorFocus*, allows the application to implement tab oriented navigation between the last field in the *RecordPanel* and the first field in the next record (and visa versa). *ActiveControl* is the ActiveControl. *TestControl* is the next (prior) control in tab order. When *ActiveControl* is equal to *TestControl*, the routine forces the focus to *GotoControl*. *GotoNext* indicates the direction to move.

See also
Navigation, *FormKeyDown* procedure, *MonitorFocus* procedure

Flags property
Declaration
```
property Flags: TMROFlags;
```

These are the possible values that can be included in the *Flags* set for the *taDBMRO* control:

<u>Value</u>	<u>Meaning</u>
mroAutoCursor	When *True*, as the user moves the cursor over a field in a nonselected record, the cursor will assume the shape corresponding to that
field.	When *False*, the cursor will not change shape when moving over
fields	in nonselected records.
mroMouseClick	When *True*, taDBMRO automatically inserts itself into the

Application.OnIdle event loop resulting in mouse clicks moving the caret into the field or dropping down lists when pressed over a button.

mroBtnWidth When *True* and running under Win95, all drop down buttons (except in TDBComboBox's) in the nonselected record will be 16 pixels wide. When False and running under Win95, the drop down buttons will have a width equal to GetSystemMetrics(SM_CXVSCROLL).

The default value of Flags is [*mroAutoCursor*, *mroMouseClick, mroBtnWidth*].

The purpose of *mroBtnWidth* is to compensate for the fact that most controls containing buttons do not use the SM_CXVSCROLL parameter in sizing the width of their buttons under Win95 (*TDBComboBoxes* do size their buttons correctly). The only reason to change *mroBtnWidth* to *False* would be if a vendor released a new version of their control that did use SM_CXVSCROLL to size their button under Win95.

FormKeyDown procedure

Declaration

```
procedure FormKeyDown(Sender: TObject; var Key: Word;
                      Shift: TShiftState);
```

This routine should be placed in the form's *OnKeyDown* event in order to implement record navigation for the following keys: Up, Down, PgUp, PgDn, Ctrl+Home, and Ctrl+End. Be sure to set the form's *KeyPreview* property to *True*.

Orpheus users should be aware that some of these key assignments may conflict with OvcController1 key assignments. For more details, see Orpheus Support.

See also

FieldOnExit procedure, *FormKeyDownExt* procedure, *MonitorFocus* procedure, Navigation

Example

```
procedure TForm1.FormKeyDown(Sender: TObject; var Key: Word;
                             Shift: TShiftState);
begin
taDBMRO1.FormKeyDown(ActiveControl,Key,Shift)
end;
```

FormKeyDownExt procedure

Declaration

```
procedure FormKeyDownExt(Sender: TObject; var Key: Word;
                         Shift: TShiftState);
```

Same as *FormKeyDown*, but checks to see whether Sender is a control that normally processes navigation keys (Up, Down, PgUp, PgDn, Ctrl+Home, and Ctrl+End). If the control does not normally process these navigation keys, then *FormKeyDown* is called. If the control does normally process navigation keys (e.g. TDBLookupCombo), then the routine does nothing.

See also

FieldOnExit procedure, *MonitorFocus* procedure, Navigation

Example

```
procedure TForm1.FormKeyDown(Sender: TObject; var Key: Word;
                             Shift: TShiftState);
```

```
begin
taDBMRO1.FormKeyDownExt(ActiveControl,Key,Shift)
end;
```

MonitorFocus procedure
Declaration

```
procedure MonitorFocus(WinMsg: Word);
```

This routine, when used in conjunction with *FieldOnExit*, allows the application to implement tab oriented navigation between the last field in the *RecordPanel* and the first field in the next record (and visa versa). *MonitorFocus* must be called from the form's WMParentNotify and *ActiveChanged* procedures where WinMsg is Msg.Event (in WMParentNotify) and WM_SETFOCUS (in ActiveChanged).

See also
Navigation

Example

```
procedure TForm1.WMParentNotify(var Msg : TWMParentNotify);
begin
taDBMRO1.MonitorFocus(Msg.Event);
inherited
end;
```

OnDrawBackground event
Declaration

```
property OnDrawBackground: TMRODrawEvent;
```

Use this property to override the default drawing of the background region of the nonselected records.

See also
Changing the Background Color for Nonselected Records

Example

```
procedure TForm1.taDBMRO1DrawBackground(Sender: TObject;
                  Control: TControl; const CellRect: TRect);
begin
with taDBMRO1.Canvas do
 begin
  Brush.Color := clGreen;
  FillRect(CellRect)
 end
end;
```

OnDrawControl event
Declaration

```
property OnDrawControl: TMRODrawEvent;
```

Use this property to override the default drawing of controls within nonselected records. If set, this event is called rather than *DrawControl*.

See also
Supporting New Controls, *DrawString* procedure, *DrawBorder* procedure

OnPrepareLookup event

Declaration
```
property OnPrepareLookup: TMROPrepareEvent;
```

Use this property to override the default lookup behavior for *TDBLookupCombo*, *TDBLookupComboPlus*, and *TwwDBLookupCombo*. When *TtaDBMRO* performs a lookup, it only searches on one field. Since some of these controls provides the ability to lookup multiple fields, you can use this event to implement more sophisticated lookups.

Options property
Declaration
```
property Options: TDBGridOptions;
```

Same as *TDBGrid.Options* except that *dgColLines* and *dgColumnResize* are forced to be *False* and the default values are slightly different. When *dgRowLines* is enabled and *AutoHeight* is *True* or when *dgIndicator* is enabled and *AutoWidth* is *True*, the dimension(s) of *TtaDBMRO* will grow in order maintain the same number of visible rows.

The default value of *Options* is [*dgEditing,dgConfirmDelete,dgCancelOnExit*]

RecordPanel property
Declaration
```
property RecordPanel: TPanel;
```

This *TPanel* contains all the data aware controls that will be displayed in the *TtaDBMRO*. *RecordPanel* may contain any Borland, InfoPower, Orpheus, and/or Out & About Productions field data aware control. Hooks are provided to allow developers to support other controls.

See also
Supported Controls, Supporting New Controls, and *TitlePanel* property

TabStop property
Declaration
```
property TabStop: Boolean;
```

Same as *TDBGrid.TabStop* but with a default value of *False*. Generally, *TtaDBMRO* should not have the *TabStop* property set to *True*. Instead, tabbing should move into (or from) a control in the *RecordPanel*.

The default value for *TabStop* is *False.*

See also
Navigation

TitlePanel property
Declaration
```
property TitlePanel: TPanel;
```

An optional property that when set, and when *dgTitles* is set in *Options*, will display the *TitlePanel* on the top edge of the *TtaDBMRO*. Fill the *TitlePanel* with *TLabel*s (or any other object) to serve as titles for the individual fields in the *RecordPanel*. If the application allows the *dgTitles* property to be toggled, *TtaDBMRO* will toggle the *TitlePanel.Visible* property.

See also
AutoTitleHeight property

TMRODrawEvent type
Declaration
```
TMRODrawEvent = procedure(Sender: TObject; Control: TControl;
                        const CellRect: TRect);
```
Event type for *OnDrawBackground* and *OnDrawControl*.

See also
Controlling the Colors and Fonts of Nonselected Records

TMROFlags type
Declaration
```
TMROFlag = (mroAutoCursor,mroMouseClick,mroBtnWidth);
TMROFlags = set of TMROFlag;
```

The *TMROFlags* type is a set that defines the possible values of the *Flags* property.

TMROPrepareEvent type
Declaration
```
TMROPrepareEvent = procedure(Sender: TObject; Control: TControl;
                           var S : string);
```
Event type for *OnPrepareLookup*. The event should return a string *S* to be displayed inside the control.

UseColor property
Declaration
```
property UseColor: Boolean;
```

When *True*, the *Color* property is used when drawing each field within the nonselected records. When *False*, the colors of the fields in the nonselected records will match those of the corresponding fields in the *RecordPanel*.

The default value of *UseColor* is *True.*

See also
UseFont property, Controlling the Colors and Fonts of Nonselected Records

UseFont property
Declaration
```
property UseFont: Boolean;
```

When *True*, the *Font* property is used when drawing each field within the nonselected records. When *False*, the fonts of the fields in the nonselected records will match those of the corresponding fields in the *RecordPanel*.

The default value of *UseFont* is *True.*

See also
UseColor property, Controlling the Colors and Fonts of Nonselected Records

WinStyle variable
This variable was removed in version 2.0 and replaced by NewStyleControls.

Controlling EXE File Size (TADBMRO.INC)
TADBMRO.INC serves a dual purpose: the primary function of the file is to enable or disable support for third party tools, including whether *TtaDBMRO* descends from a *TDBGrid* or

InfoPower's *TwwDBGrid*.

The second function is closely related to the first, but with a subtle distinction: TADBMRO.INC provides options for disabling standard controls (as well as third party controls).

Why would one want to disable support for a standard control? To reduce the size of the EXE file. When *TtaDBMRO* draws nonselected records, it tests each control in the *RecordPanel* to see whether it is a supported control. This testing process requires that code from the supported control be included in the EXE file even if that type of control is not in the *RecordPanel*. The only way to eliminated the unnecessary code is via the compiler directives contained in TADBMRO.INC.

To illustrate the impact this can have, compiling MROPROJ2 under Delphi 1.0 with support for all standard controls plus the three Orpheus and two Out & About controls results in an EXE file size of 845KB. Disabling support for all controls other than TDBEdit by changing the compiler directives in TADBMRO.INC results in an EXE file size of 504KB, or 341KB difference.

The following strategy is recommended: enable all the compiler directives in TADBMRO.INC that you are likely to use and compile COMPLIB.DCL and your applications during the development cycle using these settings. When your application is nearing the end of the development cycle, then disable support for controls not needed by the application.

Limitations

TtaDBMRO is a descendant of TDBGrid and therefore relies on *TDBGrid* to provide data awareness and to manage <u>some</u> aspects of painting the screen. Not surprisingly, there are a few conflicts between how a *TDBGrid* paints the screen and how a MRO should paint the screen. Since these conflicts cannot be resolved without making changes in *TDBGrid* itself, and since most of the conflicts can be avoided, these limitations will simply be spelled out and work arounds noted.

There are three main limitations: First, records managed by a *TtaDBMRO* must be vertically stacked and never side by side. This limitation may be removed in subsequent versions.

Second, *TtaDBMRO* is prone to produce white space on the bottom and right edges (see definition of white space below). This can be overcome by: adjusting the height and width of the *TtaDBMRO* manually; using the *AutoHeight* and *AutoWidth* properties to manage *TtaDBMRO*'s dimensions; or by the appropriate selection of colors.

And third, keyboard navigation within the MRO is not automatic. Extra code has to be added to the form, and optionally to two controls, in order to implement keyboard navigation.

Troubleshooting

Changes to the RecordPanel in design mode not reflected in nonselected records
The nonselected records in the MRO just needs to be redrawn. Click on the scroll bar and the appearance of the nonselected records will be updated.

Control in RecordPanel is not duplicated in nonselected records
The control may not be supported by *TtaDBMRO*. See section Supporting New Controls. Also check TADBMRO.INC to see if support for the control may have been disabled.

Control duplicated in nonselected records in design mode, but not while executing, or visa versa
COMPLIB.DCL and the EXE file were compiled with different versions of TADBMRO.INC. Make sure both COMPLIB.DCL and the EXE file were compiled with the same version.

Can't navigate to the next/prior displayed record via the keyboard
Make sure that Form1.*KeyPreview* is *True* and that taDBMRO1.*FormKeyDown* is in the *OnKeyDown* event of Form1. See Navigation.

Tabbing between records isn't working
If you have followed the instructions described in Tabbing Between Records and you are still having a problem, the most likely cause is that some other control is temporarily getting the focus before *TestControl* does in the *FieldOnExit* routine. In most cases, this turns out to be a *TGroupBox* or *TPanel* (other than the *RecordPanel* or *TitlePanel*). Try replacing the current *TestControl* with the *TGroupBox* or *TPanel*.

Clicking on a region of the selected record that is not occupied by a control leaves no control with the focus
You can move the focus to a specific control by adding an *OnClick* event to the *RecordPanel*:

```
procedure TForm1.Panel1Click(Sender: TObject);
begin
DBEdit1.SetFocus
end;
```

taDBMRO does not install properly
The most common installation problem is one in which by adding 'd:\tadbmro' to the search path (see Options|Install Components|Search Path) causes the maximum length of the search path to be exceeded. The only solution is to shorten the length of the path names or combining multiple directories into a single directory.

Up and Down keys not working for TDBLookupCombo, TDBLookupList, ...
Check to see whether taDBMRO1.*FormKeyDown* is being called in Form1.*FormKeyDown*. If so, call taDBMRO1.*FormKeyDownExt*.

Can TDBLookupComboPlus coexist with keyboard navigation?
Yes, if it is okay to drop down the lookup list via Alt+Down rather than Down. The trick here is to use taDBMRO1.*FormKeyDown* under all conditions except when the drop down list is visible:

```
procedure TForm1.FormKeyDown(Sender: TObject; var Key: Word;
                             Shift: TShiftState);
begin
if (not (ActiveControl is TDBLookupComboPlus)) or
   (not (ActiveControl as TDBLookupComboPlus).ListVisible) then
 taDBMRO1.FormKeyDown(ActiveControl,Key,Shift)
end;
```

Horizontal scroll bar appears on the bottom of the TtaDBMRO
Check to make sure that only one field in the *DataSource* has the *Visible* property set to *True* and set the *DisplayWidth* of the visible field to a small value (e.g. 1) and *DisplayLabel* of the visible field is short or blank. Your program should not alter the *Visible* property of any of the fields or change the *DisplayWidth* or *DisplayLabel* of the visible field. If you did not set a field visible, *TtaDBMRO* will select one for you (usually the first field). Also check that the *Height* and *Width* of the *TtaDBMRO* is greater than *RecordPanel*.*Height* and *RecordPanel*.*Width*.

If this occurs when InfoPower support is enabled, the taDBMRO is on a tabbed notebook or page, and the DataSource.DataSet.Active property is being toggled, add the following code after the Active property has been set to True:

```
        taDBMRO1.DataSource := wwDataSource1;
        taDBMRO1.DataSource.DataSet.First;
```

Sluggish TtaDBMRO redraw
Check to make sure that only one field in the *DataSource* has the *Visible* property set to *True* and that *DefaultDrawing* has not been set to *True*.

Excessive screen flicker
To minimize flicker, the *Color* and *BackgroundColor* of the taDBMRO should be the same as *RecordPanel.Color*. If *RecordPanel.Color* is different from *BackgroundColor*, then set the *Color* of the taDBMRO to the same color as *BackgroundColor*.

Clicking on a field in a nonselected record does not move the caret into the field
You need to add either set *mroMouseClick* to *True* in the *Flags* property or set *Application.OnIdle* to taDBMRO1.*ApplicationIdle*. See Navigation.

Demo program will not compile
Check to see if *TtaDBMRO* has been installed properly. If not, rebuild your library. Each demo has two versions: one for *TtaDBMRO* descending from *TDBGrid* and one for *TtaDBMRO* descending from *TwwDBGrid*. Make sure you are using the correct one. See instructions under Demo Programs.

Demo program doesn't duplicate fields in nonselected record
Check to see if any of the compiler directives in TADBMRO.INC have been disabled for standard Borland controls. If so, enable them. On the '3d Party' page of MROPROJ1, only those controls that are both installed and enabled will appear.

Application GPF while using Orpheus 1.0x data aware controls
Check the *Tag* field of all Orpheus data aware controls in the *RecordPanel* and make sure it is zero. Setting the *Tag* field to a non zero value in design mode will cause a GPF in complib.dcl, while doing so at run time will cause a GPF in the application.

Error 15: File not found (xxxxx.DCU)
Check to make sure the compiler directives in TADBMRO.INC are set correctly. Enabling a compiler option means that the related component(s) must already be installed. If they are not, the installation or rebuild of TtaDBMRO will fail and generate the above error message. The offending compiler directive can usually be found in the Uses clause near 'xxxxx'.

How to Order
To receive a registered version of *TtaDBMRO*, which includes all source code, support for *TwwDBGrid* and *TDBLookupComboPlus*, technical support, along with free updates of version 2.x, just send $25 U.S. with the order form that appears at the end of this document. Or you may email your name, address, MasterCard or Visa number, and expiration date to Tamarack Associates at 72365.46@compuserve.com. Sales tax will be added to California orders. Delivery is free via CompuServe or Internet, $5 in North America (Canada, Mexico, & U.S)., $10 outside of North America. Please specify 3.5" or 5.25" diskettes.

TtaDBMRO is also available through CompuServe SWREG for $29.95 (CompuServe charges Tamarack Associates a 15% handling fee). The SWREG registration ID is 8213.

Please read the Purchase Agreement before registering.

Version History
The latest version of *TtaDBMRO* can always be found on CompuServe in the Delphi and BDelphi forums, Lib 22 (3d Party Products), in MRO.ZIP.

05/06/96 Version 2.00 Delphi 2.0 support added

TDBLookupComboBox support added
TDBLookupListBox support added
DrawText procedure renamed DrawString
TwoTone parameter added to DrawBorder procedure
Ctrl+Del deletes the current record
WinStyle variable replaced with NewStyleControls

02/23/96 Version 1.12 taDBMRO1.BorderStyle = bsNone problem fixed
RecordPanel.OnClick event properly recognized
FormKeyDown now works with non-TTable DataSets
Improved error handling
Compatible with TDBLookupComboPlus 4.0
Compatible with TDBComboBoxPlus 2.0

01/03/96 Version 1.11 Support added for TwwDBLookupComboDlg
Support for DataType's <> ftMemo added for TDBMemo controls
System color changes handled properly
Dither95 constant is no longer public
Win95 scroll bar colors always drawn properly
TDBLookupComboPlus works properly when LookupIndex set
Improved appearance of disabled controls in obscure color combinations
Flags property added
Width of drop down buttons under Win95 corrected

12/04/95 Version 1.10 TDBCheckBox, TDBRadioGroup, TDBListBox, TDBLookupList, TDBMemo, and TDBImage support added
Full cursor support for nonselected records added
WinStyle variable and TWinStyle type added
Dither95 typed constant added
FormKeyDown now uses Append rather than Insert
FormKeyDownExt procedure added
Ctl3D parameter added to DrawBorder procedure
Enabled parameter added to DrawText procedure
DrawText Offset parameter changed to OffsetX & OffsetY
OnPrepareLookup event & TMROPrepareEvent type added
Ctl3D & Enabled properties correctly handled
DBLookupCombo's now handle DisplayField's
Underscores for accelerators now drawn (e.g. &File is File)
TPanel.BorderStyle = bsSingle now drawn correctly
Design mode GPF when Record/TitlePanel deleted fixed
Field's Visible property no longer has to be set in design mode
Additional compiler directives added to TADBMRO.INC
Losing character when inserting very first record fixed
Moving off inserted records that are unmodified handled better
Background color, broken in 1.01, fixed
README.1xx file added to distribution list

11/12/95 Version 1.01 TGroupBox, Orpheus, and TDBComboBoxPlus support added
Setting RecordPanel to NIL no longer causes GPF
Flicker after moving out of an edited field eliminated
Clicking problem on TDBComboBox fixed
TPanel's (other than RecordPanel) now respect UseFont & UseColor
STATES.DB and STATES.PX no longer needed for MROPROJ2
Minor adjustments to height calculations
Minor adjustment to positioning of right justified text

TADBMRO.INT added to trial run version

10/31/95 Version 1.00   First release

Purchase Agreement

Terms of License Agreement

The TtaDBMRO programs and documentation are the property of Tamarack Associates and are protected by United States Copyright Law, Title 17 U.S. Code, are licensed for use by one person only on as many computers as that person uses.

Where a group of programmers are working together on a project that makes use of TtaDBMRO, we expect that a copy of the software and documentation will be purchased for each member of the group. Contact Tamarack Associates for volume discounts.

You may duplicate the TtaDBMRO programs and documentation files for backup use only.

You may distribute without further licenses or run time fees applications that make use of TtaDBMRO. You may not distribute or duplicate any documentation, source code, or DCU files other than described above.

Limited Warranty

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IN NO EVENT WILL TAMARACK ASSOCIATES BE LIABLE TO YOU OR ANY THIRD PARTY FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING OUR OF THE USE OF OR INABILITY TO USE THE PROGRAM OR MANUAL.

By using this product, you agree to this. If you do not agree, immediately return this product for refund.

Development Environment

TtaDBMRO was developed with Delphi 1.02 and 2.0 running under WFWG 3.11, Win95, and NT 3.51 with 16MB of RAM using Paradox tables. Orpheus 2.0, InfoPower 1.2, DBPlus1 2.1, DBPlus2 4.1.

Trademarks

Borland and Paradox are trademarks of Borland International.

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Technical Support

Questions, bug reports and suggestions may be directed to:

Tamarack Associates
CompuServe 72365,46
Internet 72365.46@compuserve.com
(415) 322-2827 (Voice & Fax)

Please clearly state what compiler options have been set in TADBMRO.INC.

Files

Trial run version includes:

MROREG.PAS	Source code for registering taDBMRO
MROPROJ1.DPR	Project file for main demonstration program
MROUNIT1.DFM	Form file for main demonstration program
MROUNIT1.PAS	Source code for main demonstration program
MROPROJ2.DPR	Project file for second demo
MROUNIT2.DFM	Form file for second demo
MROUNIT2.PAS	Source code for second demo
README.TXT	Brief installation instructions
README.2xx	Brief description of version changes
TADBMRO.D16	Delphi 16 bit DCU file (Trial Run only)
TADBMRO.D32	Delphi 32 bit DCU file (Trial Run only)
TADBMRO.HLP	Help file
TADBMRO.INC	Contains conditional compiler directives
TADBMRO.INT	TADBMRO.PAS interface section (Trial Run only)
TADBMRO.KWF	Help keyword file
TADBMRO.RES	Resource file
TADBMRO.WRI	This file

Registered version includes these additional files:

TADBMRO.PAS	Source code
MROPROJA.DPR	Same as MROPROJ1, but with TwwDBGrid ancestor
MROUNITA.DFM	Same as MROUNIT1, but with TwwDBGrid ancestor
MROUNITA.PAS	Same as MROUNIT1, but with TwwDBGrid ancestor
MROPROJB.DPR	Same as MROPROJ2, but with TwwDBGrid ancestor
MROUNITB.DFM	Same as MROUNIT2, but with TwwDBGrid ancestor
MROUNITB.PAS	Same as MROUNIT2, but with TwwDBGrid ancestor

Order Form

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