RIDComp unit

This unit is for the Report Interface Designer Delphi 2.0/3 component.

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Components

TRIDComp

Types TActionEvent TErrorEvent

Constants

Error Constants used in the	<u>OnError</u> event:
errBuildObjList	1099
errPopulateParams	1098
errPopulateSQLControls	1097
errShowRpt	1096
errRIDExecRpt	1095
errUnknownMajorVersion	1094
errUnknownMinorVersion	1093
errUnknownFileFormat	1092
errRIDBuildStream	1091
Action Constants used in the	onAction event:
actNothing	0
actOK	1
actCancel	2
actHelp	3
actClose	6
actLoad	11

actSave12actClear13actAutoLaunch98actInit99

Status Constants used by the Status method:stsBadDLL-1stsOk0

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<u>Tasks</u>

Unit

<u>RIDComp</u>

Description

TRIDComp is the Report Interface Designer "design-time" component for the Borland Delphi development environment. It provides a programmatic link between Delphi 2.0/3, Report Interface Designer, and Seagate Crystal Reports.

To use this component, just select from the palette and drop onto the main form of your application.

Many of the properties and functionality can be tested at design-time. Set the <u>DDFName</u> property with an appropriate value then activate the <u>Preview</u> property. Preview will call the <u>Execute</u> method to display the RID dialog.

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Properties

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	C	Database
		DataSource
		DDFName
		Destination
		DialogOnly
		Name
	Come	Password
	ParamStrs	
	Course of the second	Preview
		RptDirectory
		Tag
	C	<u>UserID</u>

Methods

🖙 Key methods

	<u>Create</u>
	Destroy
()	Execute
	<u>Status</u>

Events

🖙 Key events



About the TRIDComp component

TRIDComp reference

Purpose

Use the TRIDComp component to connect your applications to the criteria dialogs you designed using the Report Interface Designer application.

Tasks

Add an instance of the TRIDComp component to your project by selecting from the palette and dropping onto your main form. In your code, set the <u>DDFName</u> property and then call the <u>Execute</u> method.

During the design phase, you can <u>Preview</u> what the RID dialog will look like, and as long as the <u>DialogOnly</u> property is FALSE, pressing the Ok button on the displayed dialog will activate Crystal Reports to display the report using the specified criteria.

About property

Applies to

TRIDComp component

Declaration

property About;

Description

Design-time pseudo property which displays an About Box for the RIDComp component when the "..." ellipse button is pressed in the Object Inspector.

<<< See also of About property >>>

About property example

Database property

See also

Applies to <u>TRIDComp</u> component

Declaration

property Database: String;

Description

This property is used in conjunction with the DataSource property. It will be populated when a report is assigned, but can be changed if desired. No verification is performed at the time of the change, so it is important that the new database has the same reporting structure.

Datasource property UserID property Password property

DataSource property

See also

Applies to <u>TRIDComp</u> component

Declaration

property DataSource: String;

Description

This property is a combobox listing all configured ODBC datasources. If the report is ODBC-based and the DSN for the report is configured on the current PC, then this value will be automatically selected. If the report is SQL-based, i.e., using a native driver, then the program will attempt to locate an ODBC DSN of that same name. If one cannot be found, the value will be set to *<unknown>*.

A valid ODBC configuration is only necessary if using either the "runtime-sourcing" capabilities of the ListBox or ComboBox controls. An interesting feature of both Crystal Reports and RID is that a combined native driver/ODBC driver combination can be implemented. If the report is based on a native driver but you would like to use the SQL controls, then it is necessary to configure an ODBC datasource targeted at the same server (and named the same) as the DataSource property of the TReport control in the RID DialogBox. In this way, data for the controls will be populated using an ODBC connection while the native connectivity will be used during the actual report execution.

Database property UserID property Password property

DDFName property

See also

Applies to <u>TRIDComp</u> component

Declaration property DDFName: String;

Description This is the name of the Dialog Definition File.

<u>RptDirectory</u> property <u>Preview</u> property <u>Execute</u> method

Delimiter property

See also Example

Applies to <u>TRIDComp</u> component

Declaration property Delimiter: Char;

Description <<< Description of Delimiter property >>> Run-time only

<<< See also of Delimiter property >>>

Delimiter property example

Destination property

Applies to <u>TRIDComp</u> component

Declaration property Destination: Integer;

Description This property is not currently implemented.

DialogOnly property

See also Example

Applies to <u>TRIDComp</u> component

Declaration

property DialogOnly: Boolean;

Description

This property determines if Crystal Reports will be called when the "Ok" button is pressed on the RID Dialog. The functionality may be useful if you are only interested in returning the selection criteria chosen by the user.

Preview property Execute method

DialogOnly property example

The following code is a modified copied from the RIDView sample program. This program has a combobox that stores the name of the files selected using an OpenDialog component. When a toolbar button is pressed, this retrieves the filename associated with the currently selected combobox entry and sets the <u>DDFName</u> property of the RIDComp component. The <u>DialogOnly</u> property is then set to TRUE, and the <u>Execute</u> method is called to display the dialog and permit the user to enter criteria. When the user presses the Ok button, Crystal Reports is not activated, though the <u>OnAction</u> event is still triggered.

```
procedure TMainForm.ExecMenuClick(Sender: TObject);
begin
    if (cbxDDF.Text <> '') then
        with RIDComp1 do
        begin
        DDFName := TStr(cbxDDF.Items.Objects[cbxDDF.ItemIndex]).Str;
        DialogOnly := TRUE;
        Execute;
        end;
end;
end;
```

Name property

Applies to <u>TRIDComp</u> component

Declaration property Name;

Description The name of the control.

ParamStrs property

Example

Applies to <u>TRIDComp</u> component

Declaration

property ParamStrs: TStringList;

Description

This property permits run-time assignment or retrieval of Parameter values, in "Name=Value" format. These values can be referenced or changed during the OnAction() event execution phase.

Run-time only

ParamStrs property example

The following example demonstrates how to access the dialog parameters during the OnAction event.

procedure TMainForm.RIDComp1Action(Action: Word; var aModalResult: Word);

```
var
 PL : TStringList;
  Act : String;
 PF : TParamForm;
begin
  if NOT(FParamsFlag) then
    Exit;
  try
    PL := TStringList.Create;
    PF := TParamForm.Create(Self);
    case Action of
      actNothing : Act := 'actNothing';
                                        : Act := 'actOK';
      actOK
      actCancel : Act := 'actCancel';
actHelp : Act := 'actHelp';
      actHelp : Act := 'actHelp';
actClose : Act := 'actClose';
      actLoad : Act := 'actLoad';
actSave : Act := 'actSave';
actClear : Act := 'actClear';
      actAutoLaunch : Act := 'actAutoLaunch';
      actInit
                    : Act := 'actInit';
    end;
    with PF do
      begin
        PL.Assign(RIDComp1.ParamStrs);
        ParamStrs := PL;
        CurrAction := Act;
        ShowModal;
        PL.Text := ParamStrs.Text;
        RIDComp1.ParamStrs := PL;
      end;
   finally
    PF.Free;
    PL.Free;
  end;
end;
```

ParentHWnd property

Applies to

TRIDComp component

Declaration property ParentHWnd: HWND;

Description

This "write-only" property permits assignment of a Parent window for the Report output window. Use this when creating an MDI application where you wish to fully contain the report window within a child window.

Run-time only Write-only

Password property

See also

Applies to <u>TRIDComp</u> component

Declaration

property Password: String;

Description

This property is used in conjunction with the UserID property, and needs to be set when using any SQL controls (TComboBox, TListBox) associated with a protected database. This property will be populated when a Report is assigned.

Database property Datasourceproperty UserID property

Preview property

See also

Applies to <u>TRIDComp</u> component

Declaration

property Preview: String;

Description

This is not really a property, but a mechanism for viewing RID dialogs at "design-time". Set the <u>DDFName</u> property and then activate the **Preview** mode to see the actual RID dialog. If <u>DialogOnly</u> is set to TRUE, then Crystal Reports will not be executed.

Execute method

RptDirectory property

See also

Applies to <u>TRIDComp</u> component

Declaration

property RptDirectory: String;

Description

This property determines where RID will look for the Crystal Reports .RPT files. The report file will be located based on the following criteria:

- 1. If the *RptDirectory* property has a value, use it to find the .RPT file.
- 2. If the .RPT file is not found using the *RptDirectory* value, check in the same location as the DDF file.
- 3. If not found where the DDF file is, then use the path stored when the Report Association was made in the Report Interface Designer application.
- 4. If not found, then look in the directory where the current application was execute from.
- 5. If still not found, display an error.

DDFName property

Tag property

Applies to <u>TRIDComp</u> component

Declaration property Tag;

Description The tag property for the control.

UserID property

See also

Applies to <u>TRIDComp</u> component

Declaration

property UserID: String;

Description

This property is used in conjunction with the Password property, and needs to be set when using any SQL controls (TComboBox, TListBox) associated with a protected database. This property will be populated when a Report is assigned. Protected

Database property Datasource property Password property

Create method

Applies to <u>TRIDComp</u> component

Declaration

constructor Create(AOwner: TComponent); override;

Description

This is the default object constructor.

Destroy method

Applies to <u>TRIDComp</u> component

Declaration destructor Destroy; override;

Description This is the default object destructor.

Execute method

See also Example

Applies to <u>TRIDComp</u> component

Declaration function Execute: Integer; virtual;

Description

Call this method to initiate the Dialog display and Report creation execution sequence.

Preview property

Execute method example

The following code is copied from the RIDView sample program. This program has a combobox that stores the name of the files selected using an OpenDialog component. When a toolbar button is pressed, this retrieves the filename associated with the currently selected combobox entry and sets the <u>DDFName</u> property of the RIDComp component. Then the <u>Execute</u> method is called to display the dialog and permit the user to enter criteria.

```
procedure TMainForm.ExecMenuClick(Sender: TObject);
begin
    if (cbxDDF.Text <> '') then
    with RIDComp1 do
        begin
        DDFName := TStr(cbxDDF.Items.Objects[cbxDDF.ItemIndex]).Str;
        Execute;
    end;
end;
```

Status method

Example

Applies to <u>TRIDComp</u> component

Declaration

function Status: Integer;

Description

Call this method to check the status of the RID Engine. Result values are either stsOk (0) or stsBadDLL (-1), which usually occurs when the RIDComp component cannot find the RIDExec.dll file.

Status method example

This code uses a button and a TRIDComp component on a form. When the user clicks the button, the code tests the Status of the component.

```
procedure TForm1.Button1Click(Sender: TObject);
var
StatRes : Integer;
begin
StatRes := RIDComp1.Status;
case StatRes of
stsOk : ShowMessage('Status is Ok');
stsBadDLL : ShowMessage('Status is BadDLL.');
end;
end;
```

OnAction event

See also Example

Applies to

TRIDComp component

Declaration

type TActionEvent = procedure(Action: Word; var aModalResult: Word) of Object;

property OnAction: <u>TActionEvent;</u>

Description

This event is fired when a button is pressed on the RID dialog.

Action is one of the following values:

actNothing	This is a default value which should never occur.
actOK	Indicates that an "Ok" button was pressed.
actCancel	Indicates that a "Cancel" button was pressed.
actHelp	Indicates that a "Help" button was pressed.
actClose	Indicates that a "Close" button was pressed.
actLoad	Indicates that a "Load" button was pressed.
actSave	Indicates that a "Save" button was pressed.
actClear	Indicates that a "Clear" button was pressed.
actAutoLaunch	Indicates that the "AutoLaunch" property for the Report is TRUE. The OnAction
	event will be called with this value instead of the actInit value.
actInit	The event gets called with this value prior to the Dialog display.

aModalResult is the default ModalResult value for the pressed button. It can be changed at this time to keep the dialog on the screen.

The <u>ParamStrs</u> property is accessible during this event, and default control values can be set prior to the display of the dialog.

OnError event

OnAction event example

The following example demonstrates how to overwrite the standard action handling to process the dialog parameters. It is the Action handling functionality of the **RIDView** sample program.

procedure TMainForm.RIDComp1Action(Action: Word; var aModalResult: Word);

```
var
 PL : TStringList;
 Act : String;
 PF : TParamForm;
begin
  if NOT(FParamsFlag) then
   Exit;
  try
   PL := TStringList.Create;
   PF := TParamForm.Create(Self);
   case Action of
     actNothing
                   : Act := 'actNothing';
                    : Act := 'actOK';
     actOk
                   : Act := 'actCancel';
: Act := 'actHelp';
     actCancel
     actHelp
                   : Act := 'actClose';
     actClose
                   : Act := 'actLoad';
     actLoad
                  : Act := 'actSave';
: Act := 'actClear';
     actSave
     actClear
     actAutoLaunch : Act := 'actAutoLaunch';
     actInit
                  : Act := 'actInit';
    end;
    with PF do
     begin
        PL.Assign(RIDComp1.ParamStrs);
       ParamStrs :=PL;
        CurrAction := Act;
       ShowModal:
        PL.Text := ParamStrs.Text;
       RIDComp1.ParamStrs := PL;
     end;
  finally
   PF.Free;
    PL.Free;
  end;
end;
```

OnError event

See also Example

Applies to

TRIDComp component

Declaration

Description

This event is fired when an error is detected.

ErrorNum and *ErrorText* are as follows:

errBuildObjList	1099	Depends on where error occurs.
errPopulateParams	1098	Depends on where error occurs.
errPopulateSQLControls	1097	Depends on where error occurs.
errShowRpt	1096	Depends on where error occurs.
errRIDExecRpt	1095	Depends on where error occurs.
errUnknownMajorVersion	1094	Unknown Major Version in RID File.
errUnknownMinorVersion	1093	Unknown Minor Version in RID File.
errUnknownFileFormat	1092	Unknown File Format.
errRIDBuildStream	1091	Depends on where error occurs.

Handled is a boolean value with a default of FALSE. Setting this value to TRUE will stop RID from displaying the error message.

OnAction event

OnError event example

The following example demonstrates how to overwrite the standard error handling to display custom errors.

```
procedure TForm1.RIDComp1Error(ErrorNum: Word; ErrorText: PChar;
 var Handled: Boolean);
begin
 Handled := True:
 case ErrorNum of
   errBuildObjList :
     begin
       MessageBox(0, PChar(Format('[%d] "BuildObjList" Error: [%s]',
          [ErrorNum, ErrorText])),
         'Report Interface Designer', MB_ICONEXCLAMATION or MB_OK);
     end;
   errPopulateParams :
     begin
       MessageBox(0, PChar(Format('[%d] "PopulateParams" Error: [%s]',
          [ErrorNum, ErrorText])),
         'Report Interface Designer', MB_ICONEXCLAMATION or MB_OK);
     end:
   errPopulateSQLControls :
     begin
       MessageBox(0, PChar(Format('[%d] "PopulateSQLControls" Error: [%s]',
          [ErrorNum, ErrorText])),
         'Report Interface Designer', MB_ICONEXCLAMATION or MB_OK);
     end:
   errShowRpt :
     begin
       MessageBox(0, PChar(Format('[%d] "ShowRpt" Error: [%s]',
          [ErrorNum, ErrorText])),
         'Report Interface Designer', MB ICONEXCLAMATION or MB OK);
     end;
   errRIDExecRpt :
     begin
       MessageBox(0, PChar(Format('[%d] "RIDExecRpt" Error: [%s]',
          [ErrorNum, ErrorText])),
         'Report Interface Designer', MB_ICONEXCLAMATION or MB_OK);
     end;
 end;
end;
```

TActionEvent type

See also

Unit RIDComp

Declaration

Description

Assign a handler to this event to respond to a button-press action. The Action value corresponds to one of the act???? constants. The aModalResult value corresponds to the default value assigned to the pressed button. You can change this value to modify the default behavior.

OnAction event

TErrorEvent type

See also **Unit** <u>RIDComp</u>

Declaration

Description

Assign a handler to this event to trap any errors that are generated during the Execute() phase. The ErrorNum value corresponds to one of the err???? constants. The ErrorText value is the default error message. Handled defaults to FALSE. If you set it to TRUE, the RID engine will not display an error message.

OnError event

Contacting TRI-I Engineering, Inc.

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- o RIDExec.dll Every client will need this file installed in either the Application directory (preferred) or in the Windows System directory.
- o RIDCompX.ocx RIDCompX.tlb These files are only required if you are developing with the RID ActiveX component. As part of your own installation program, this file will need to be copied to the client Windows System directory and then registered. If your installation program does not automatically detect and register OCX files, then you will need to manually register this component using REGSVR32.EXE. Following is an example:

REGSVR32 <ocx directory>\RIDCompX.ocx

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