Printit - Form and Window Printing Module

The Components

   TPrintWin

   THRuler

   TVRuler

 TShowTotal

The Print Viewer

◆ The Print Viewer

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About

ORDER FORM

Orders must be placed by filling out the necessary order forms - see icons in PrintIt! group.

Product Information

Overview

Printit is a set of Visual Component Library Classes that makes printing easy for the Delphi programmer. Programming to print was always a difficult task for the programmer. Even in Delphi printing is still a problem.

 If you want to print a report you must use a report generator. A report generator has the following disadvantages:

       * It is slow to start up.
       * It must be set up separately from your application
       * If something changes in your original Query or Table then the report must be adjusted as well.
       * It is not part of your application and a Run Time Version of the Report Generator is normally supplied with you application.

Report Generators are generally quite flexible when it comes to creating a variety of different reports.

If you want to print a form e.g. an Invoice or Job Card, it becomes more difficult with a Report Generator because of the disadvantages mentioned above.

Enter - Printit

Printit can remove the above disadvantages because Printit is a set of components that are linked into your executable.

       * Printit needs no licensing to end users. Only developers must have a license.
       * Printit can make use of your Query and Table components. If your table or Query changes then PrintIt knows about the changes because Printit uses you Table or Query components as input.
       * Printit can also print selected windows as they appear or mix them with Tables and/or Queries as required.
       * Printit can mix graphics with your text or tables and draw lines, rectangles, circles, ellipses etc. and fill them with any color and/or use a pattern for all solid figures.
       * Printit can change the headings of reports and use color as required.
       * Printit has a preview utility to view any page before printing. The Viewer has built-in Zoom and Scroll facilities. The Viewer is very fast and optimized for screen redraw and printing.
       * No extra DLL is necessary.
       * Printit becomes part of your executable.

DrawEllipse Method

Applies to

<u>TPrintWin</u> Component

Declaration

procedure DrawEllipse(x1, y1, x2, y2: Real);

Description

The DrawEllipse method draws an ellipse defined by a bounding rectangle on the printer. The top-left point of the bounding rectangle is at Inches or Centimetre coordinates (x1, y1) and the bottom-right point is at (x2, y2). If the points of the rectangle form a square, a circle is drawn.   Measurements are in Inches or Centimetre depending on the setting of <u>Units.</u>

DrawTableInRect Method

Applies to

TPrintWin Component

Declaration

procedure DrawTableInRect(x1,y1,x2,y2: Real; Table: TTable;
        XMinimize: Boolean; PrintTotals: Boolean);

Description

Draws the contents of a TTable and scale it to fit in a rectangle bounded by x1,y1,x2,y2

Measurements are in Inches or Centimetre depending on the setting of Units.

TPrintWin Component

Unit
PrnWin

Description
The PrintWin component is used to print any mix of lines, rectangles, Tables, Queries, contents of windows, text etc.. By using the Fields Editor, the programmer can determine which fields of tables or queries are going to be printed. The programmer can hide controls which should not be printed or print tables or queries which only has a TTable or TQuery component without a visual component.

Numerous settings can be applied to change the appearance of the PrintWin component.   Fonts, Colors and brushes can be changed as deemed necessary. Use the FooterEnabled , FooterFilled , FooterLine, FooterOutlined, FooterString, FooterTop properties to format and display the footer. Use the HeaderEnabled , HeaderFilled , HeaderLine, HeaderOutlined, HeaderString, HeaderTop properties to format and display the header

The BorderTop, BorderLeft and BorderRight properties determine the borders. The LineSpacing property determine the distance between 2 lines when printing the contents of a window.

The PrintWin methods can be split into 2 groups.

1. The absolute control group

These include the basic drawing methods like methods for drawing lines, text, rectangles, pies, arcs, bitmaps, grids, windows and their contents, Tables, Queries, etc. With this group the programmer must decide by using the NewPage method when to go onto a new page. Each page can have as many components as the programmer desire. The drawbacks of this group are the follow:

        a. The programmer has to do more programming than group 2.
        b. Tables and Queries currently cannot continue onto a second page - so the contents must fit on one page or will be clipped at the edge of the page.

2. The automatic print group

The main method of this group is the DrawWindowMultiple method. It takes as arguments the offset onto a page and the TWinControl that contains the components that must be printed. This TWinControl can be one of the following:
        TForm,
        TPanel
        TScrollBox
        TNotebook
All supported components on these pages will be printed

BorderRight Property

Applies to

TPrintWin component

Declaration

property BorderRight: double

Description

Indicates the border on the right side of the page where there should be no printing. Measurements are in Inches or Centimetre depending on the setting of Units.

BorderLeft Property

Applies to

<u>TPrintWin</u> component

Declaration

property BorderLeft: double

Description

Indicates the border on the left side of the page where there should be no printing. Measurements are in Inches or Centimetre depending on the setting of <u>Units.</u>

Brush Property

Applies to

<u>TPrintWin</u> Component

Declaration

property Brush: TBrush;

Description

Indicates the brush which should be used for the background and for filling in objects e.g. rectangles, arcs, etc. Please note that if a component has a brush property then that will be used instead.

TextColor Property

Applies to

<u>TPrintWin</u> component

Declaration

property TextColor: TColor**;**

Description

TheTextColor property determines the color of the text characters.

FooterEnabled Property

Applies to

<u>TPrintWin</u> components

Declaration

property FooterEnabled: Boolean

Description

Indicate if the footer should print on the page. The default value is True;

FooterFilled Property

Applies to

<u>TPrintWin</u> Component

Declaration

property FooterFilled: Boolean

Description

Indicate if the footer should be filled with the current brush. The default value is False

THRuler Component

Unit HRuler

Description

The TVRuler and THRuler components are used primarily in the design stage of a project. They are Vertical and horizontal rulers which can be set for Inches or Centimetre.   They are normally used together with the GridBackDrop and GridBackdropUnits properties of TPrintWin component.

They can be set on Panels, ScrollBoxes, Forms etc.

FooterLeft Property

Applies to

TPrintWin components

Declaration

property FooterLeft**:** double

Description

Indicate the left starting position of the footer.   Measurements are in Inches or Centimetre depending on the setting of Units.

FooterLine Property

Applies to

TPrintWin components

Declaration

property FooterLine: Boolean

Description

Indicate if the footerline should be printed. The default value is True.

FooterOutlined Property

Applies to

TPrintWin components

Declaration

property FooterOutlined: Boolean;

Description

Indicate if the footer should be outlined with the current pen. The default value is False.

FooterString Property

Applies to

<u>TPrintWin</u> components

Declaration

property FooterString: String

Description

Indicate the string that should appear as the Footer.

FooterTop Property

Applies to

TPrintWin components

Declaration

property FooterTop: double

Description

Indicates the top position   where the footer should start printing. Measurements are in Inches or Centimetre depending on the setting of Units.

HeaderEnabled Property

Indicate if the header should print on the page. The default value is True;

HeaderFilled Property

Applies to

<u>TPrintWin</u> components

Declaration

property HeaderFilled: Boolean

Description

Indicate if the header should be filled with the current brush. The default value is False

HeaderLeft Property

Applies to

TPrintWin components

Declaration

property HeaderLeft: double;

Description

Indicate the left starting position of the header. Measurements are in Inches or Centimetre depending on the setting of Units.

HeaderLine Property

Applies to

<u>TPrintWin</u> components

Declaration

property HeaderLine: Boolean

Description

Indicate if the header line should be printed. The default value is True.

HeaderOutlined Property

Applies to

TPrintWin components

Declaration

property HeaderOutlined: Boolean

Description

Indicate if the header should be outlined with the current pen. The default value is False.

HeaderString Property

Applies to

TPrintWin components

Declaration

property HeaderString: String

Description

Indicate the string that should appear as the Header.

HeaderTop Property

Applies to

TPrintWin components

Declaration

property HeaderTop**:** double

Description

The HeaderTop property determines the vertical coordinate of the top edge of the Header if the header is to be printed. Measurements are in Inches or Centimetre depending on the setting of Units.

Name Property

TPrintWin components

Declaration

property Name: TComponentName;

Description

The Name property contains the name of the component as referenced by other components. By default, Delphi assigns sequential names based on the type of the component, such as 'Button1', 'Button2', and so on. You may change these to suit your needs.

Note: Change component names only at design time.

XOffset Property

THRuler component

Declaration

property XOffset: Real;

Description

Indicates the distance from the left of the parent window. If negative then only the positive part of the ruler will be displayed. It displayes measurements in Inches or Centimetre depending on the settings of the Units property.

Pen Property

Applies to

<u>TPrintWin</u> Component

Declaration

property Pen: TPen;

Description

A canvas object's Pen property determines what kind of pen the canvas uses for drawing lines and shape outlines.

Bold Method

Applies to

TPrintWin Component

Declaration

procedure Bold;

Description

Changes the current fort to Bold All other attributes remain the same.

THRuler Properties

XOffset
Units
AlignRuler

Tag Property

Applies to

TPrintWin component

Declaration

property Tag: LongInt

Description

The Tag property is available to store an integer value as part of a component. This is the default Delphi Tag property which the user can use.

DrawQueryInRect Method

Applies to

<u>TPrintWin</u> Component

Declaration

procedure DrawQueryInRect x1,y1,*x2*,y2: Real; Table: TTable;
      XMinimize: Boolean; PrintTotals: Boolean);

Description

Draws the contents of a TQuery and scale it to fit in a rectangle bounded by x1,y1,*x2*,y2

Measurements are in Inches or Centimetre depending on the setting of <u>Units.</u>

OutputTo Property

Applies to

TPrintWin components

Declaration

property OutputTo TOutput;

Description

Indicates where the output will be sent to. This can take on the values of poPrinter or poViewer.

GridBackDropUnits Property

Applies to

TPrintWin Component

Declaration

property GridBackDropUnits: TUnits;

Description

Indicates the units which must be used when printing the backdrop rulers. It can be poInches or poCentimetres. See also GridBackDrop.

TVRuler Component

Unit VRuler

Description

The TVRuler and THRuler components are used primarily in the design stage of a project. They are Vertical and horizontal rulers which can be set for Inches or Centimetre.   They are normally used together with the GridBackDrop and GridBackdropUnits properties of TPrintWin component.

They can be set on Panels, ScrollBoxes, Forms etc.

PageWidth Method

Applies to

TPrintWin Component

Declaration

 function   PageWidth: Real;

Description

Returns the Width of the page on the printer in Inches or Centimetre depening on the setting of Units

OnAfterPrint Event

Applies to

TPrintWin component

Declaration

property OnAfterPrint: TNotifyEvent;

Description

The OnAfterPrint event occurs after the complete Report has been printed. Your application can use this event to do any necessary cleanup.

OnBeforePrint Event

Applies to

TPrintWin component

Declaration

property OnBeforePrint: TNotifyEvent;

Description

The OnBeforePrint event occurs before anything has been printed. Your application can use this event to do any necessary initialization.

OnNewPage Event

Applies to

TPrintWin component

Declaration

property OnNewPage: TNotifyEvent;

Description

The OnNewPage: event occurs before a new page starts printing. Your application can use this event to do any necessary cleanup per page.

OnPrint Event

Applies to

TPrintWin component

Declaration

property OnPrint: TNotifyEvent;

Description

The OnPrint event occurs before printing starts for each page. Your application can use this event to do any necessary initialization

OnPrintHeader Event

Applies to

TPrintWin component

Declaration

property OnPrintHeader: TNotifyEvent;

Description

The OnPrintHeader event occurs before the header is printed. Your application can use this event to do any necessary initialization

OnPrintFooter Event

Applies to

TPrintWin component

Declaration

property OnPrintFooter: TNotifyEvent;

Description

The OnPrintFooter event occurs before the footer is printed. Your application can use this event to do any necessary initialization

OnPrintPage Event

Applies to

<u>TPrintWin</u> Component

Declaration

property OnPrintTable TNotifyEvent;

Description

The OnPrintTable event occurs before a table or query is printed. Your application can use this event to do any necessary initialization

OnPrintPage Event

Applies to

TPrintWin component

Declaration

property OnPrintPage: TNotifyEvent;

Description

The OnPrintPage event occurs before the page is printed. Your application can use this event to do any necessary initialization

DateTimeStampEnabled Property

Applies to

<u>TPrintWin</u> components

Declaration

property DateTimeStampEnabled Boolean

Description

Indicates if the DateTimeStamp must appear on the left bottom of the printout. The default value is True

DrawQueryAt Method

Applies to

TPrintWin Component

Declaration

procedure DrawQueryAt(XOffset: Real;   YOffset: Real; Query TQuery; XMinimize: Boolean; PrintTotals: Boolean);

Description

The DrawQueryAt method draws   the Query on the printer starting at position XOffset,YOffset from the left and top of the printer page.

If XMinimize is True then TPrintWin will optimize the size of the Query horizontally.
If PrintTotals is True then totals will be printed at the end of the Query

DrawQuery currently cannot continue on a new page.

ViewHeading Property

Applies to

<u>TPrintWin</u> Component

Declaration

property ViewHeading**: string;**

Description

Indicates the Window header when using the<u> Print Viewer.</u>

BeginPrint Method

Applies to

TPrintWin Component

Declaration

procedure BeginPrint;

Description

This method should be the first method to be called for TPrintWin. It Initializes the necessary variables to be able to print.

FixSansSerif Property

Applies to

<u>TPrintWin</u> Component

Declaration

property FixSansSerif: Boolean

Description

If set to True then all occurences of MS Sans Serif fonts will be replaced with Arial. This is done because the MS Sans Serif Font does not scale very well.

TVRuler Component

Unit VRuler

Description

The TVRuler and THRuler components are used primarily in the design stage of a project. They are Vertical and horizontal rulers which can be set for Inches or Centimetre.   They are normally used together with the GridBackDrop and GridBackdropUnits properties of TPrintWin component.

They can be set on Panels, ScrollBoxes, Forms etc.

TotalType Property

Applies to

<u>TShowTotal</u> Component

Declaration

property TotalType: TTotals;

Description

Indicates what the type of the output will be. The values can be

   tPageTotal,   - a Page Total of a specific field in a TDBGrid will be displayed - Used ONLY with <u>DrawWindowMultiple</u>

   tAccTotal,   - a Running Total of a specific field in a TDBGrid will be displayed - Used ONLY with <u>DrawWindowMultiple</u>

   tPageNumber, - The Current Page number will be displayed
   tDate,   - The Current Date will be displayed
   tTime,   - The Current Time will be displayed
   tText   - The text in the property Text will be displayed

TPrintWin Properties

BorderLeft
BorderRight
BorderTop
Brush
DateTimeStampEnabled
FixSansSerif
FooterEnabled
FooterFilled
FooterFont
FooterOutlined
FooterString
FooterTop
FrameObjects

FrameStyle
GridBackDrop
GridBackDropUnits
HeaderEnabled
HeaderFilled
HeaderFont
HeaderLeft
HeaderOutlined
HeaderStringCenter
HeaderStringLeft
HeaderStringRight
HeaderTop
Interrupted

LineSpacing
LineWidth
Name
Orientation
OutputTo
PageNumberEnabled
Pen
Tag
Units
ViewBkColor
ViewHeading
ZoomPercentage

TPrintWin Methods

BeginPrint
BitBlt
Bold
DrawArc
DrawEllipse
DrawGrid
DrawLine
DrawPie
DrawQuery
DrawQueryAt
DrawQueryInRect
DrawQueryRecord
DrawRect
DrawRectAt
DrawRoundRect
DrawTable
DrawTableAt
DrawTableInRect
DrawTableRecord
DrawText
DrawTextAt
DrawThickThick
DrawThickThin
DrawThinThick
DrawThinThin
DrawWindow
DrawWindowAt
DrawWindowInRect
DrawWindowMultiple
EndPrint
FrameTableRecord
FrameWindow
GetFontColor
GetFontHeight
GetFontName
GetPageTotal
GetControlHeight
GetControlWidth
GetPageHeight
GetPageWidth
GetTextHeight
GetTextWidth
GetRunningTotal
GetWindowBottom
Interrupted
IsBold
IsItalic

TPrintWin Events

FrameObjects Property

Applies to

<u>TPrintWin</u> components

Declaration

property FrameObjects: Boolean;

Description

Indicates if objects are to be framed. The default is True.

FrameStyle Property

Applies to

<u>TPrintWin</u> components

Declaration

property FrameStyle: TFrameStyle;

Description

Determines the style of frame which will be drawn around objects. Valid values are

        frThin
        frThinThin
        frThinThick
        frThickThin
        frThickThick

DrawArc Method

Applies to

TPrintWin Component

Declaration

procedure DrawArc(x1, y1, x2, y2 ,x3, y3, x4, y4 : Real);

Description

The DrawArc method draws an arc on the printer along the perimeter of the ellipse bounded by the specified rectangle. Coordinates x1 y1 and x2 y2 define the enclosing rectangle for the arc. The arc starts at the intersection of the ellipse edge and the line from the center of the ellipse to the specified starting point x3 y3 The arc is drawn counterclockwise until it reaches the position where the ellipse edge intersects the line from the center of the ellipse to the specified ending point x4 y4. Measurements are in Inches or Centimetre depending on the setting of Units.

TVRuler Properties

Yoffset
Units
AlignRuler

LineWidth Property

Applies to

<u>TPrintWin</u> components

Declaration

property LineWidth: Integer;

Description

Determines the width of the line which is used for drawing. The default is 1.

PrintBitmap Method

Applies to

<u>TPrintWin</u> Component

Declaration

procedure procedure PrintBitmap(XOffset: Real;   YOffset: Real;   Width: Real; Height: Real;   Bitmap: TBitmap);

Description

Draws a Bitmap by using a TBitmap. If Width and Height are both 0 then then Height and Width of the bitmap will be used as read from the file.

If Height and Width are not 0 then the bitmap will be stretched to fit the rectangle

Measurements are in Inches or Centimetre depending on the setting of <u>Units.</u>

BorderTop Property

Applies to

TPrintWin components

Declaration

property BorderTop: Real

Description

Indicates the border in Inches or Centimetre on the top side of the page where there should be no printing.

Measurements are in Inches or Centimetre depending on the setting of Units.

Alignment Property

TShowTotal Component

Declaration

property Alignment: TAlignment;

Description

Indicates the alignment of the text in the control. Valid values are:
      taLeftJustify
      taCenter
      taRightJustify

ShowOn Property

Applies to

<u>TShowTotal</u> Component

Declaration

property ShowOn: TShow;

Description

Indicates on which pages of the printed output this specific component should be displayed Valid values are:

      tFirstPage
      tLastPage
      tAllPages
      tAllButFirst
      tAllButLast
      tFirstAndlast
      tAllButFirstAndLast

AlignRuler Property

Applies to

THRuler and TVRuler component

Declaration

property AlignRuler: Boolean;

Description

When clicked on this property, the ruler will be align to the top-left corner of the parent window.

Multi Language Support

Applies to

TPrintWin component

Description

Multi Language Support allows the programmer to change the text on the buttons and Dialog boxes which are used in the Viewer.

To change the langauge do the following:

Make sure that the DELPHI\BIN directory is on your path for the resource compiler BRC.EXE to work

◆ Edit the file named STRING.RC in the Printtit component directory
◆ Compile the file with the Borland Resource compiler e.g.
    BRC   -r STRING.RC
◆ Include the generated .RES file in your main application
    {$R STRING.RES}

(The best is to include it like this

```
implementation

{$R *.DFM}
{$R STRING.RES}
```

◆ Recompile and link your application

PageHeight Method

Applies to

TPrintWin Component

Declaration

 function   PageHeight Real;

Description

Returns the Height of the page on the printer in Inches or Centimetre depening on the setting of Units

GetPageTotal Method

Applies to

TPrintWin Component

Declaration

function   GetPageTotal   (Grid: TCustomGrid; ColumnName: string): Real;

Description

Returns a page total of a column in a TDBGrid of the current page. The total is already available at the beginning of the page. This option is used together with the DrawWindowMultiple method which is used to print Invoices, statements ,etc. The total is also available if a TShowTotal component is used.

DrawWindowInRect Method

Applies to

TPrintWin Component

Declaration

procedure   DrawWindowInRect (x1,y1,x2,y2: Real; Control: TWinControl);

Description

The DrawWindowInRect method draws the contents of a window onto the printer scaling it to fit in the rectangle defined by the corners x1,y1,x2,y2. These measurements are in Inches or Centimetre depending on the setting of Units.

This method currently supports the drawing of supported drawing components directly from the screen.

The same rules for drawing windows onto the printer applies as for DrawWindowAt

LineSpacing Property

Applies to

<u>TPrintWin</u> components

Declaration

property LineSpacing: String

Description

Indicates the distance between two lines. A value of 1.0 would insert the height of the text in between the two lines.

Color Property

Applies to

<u>TShowTotal</u> Component

Declaration

property Color: TColor;

Description

Indicates the background color for a component.

GetTextWidth Method

Applies to

TPrintWin Component

Declaration

function GetTextWidth (str: string): Real;

Description

Returns the Width of the string in Inches or Centimetre depending on the setting of Units.

FooterFont Property

TPrintWin Components

Declaration

property FooterFont: TFont;

Description

Indicates the font that will be used to print the Footer at the bottom of the page.

Create Method

Applies to

<u>TPrintWin</u> Component

Declaration

constructor Create;

Description

The Create method allocates memory to create the object and initializes its data as needed. Each object can have a Create method customized to create that particular kind of object.

Units Property

Applies to

TPrintWin Component

Declaration

property Units: TUnits;

Description

Indicates the measurement system which must be used. Allowed values are:

      poInches
      poCentimetres

ViewBkColor Property

Applies to

TPrintWin Component

Declaration

property ViewBkColor: TColor;

Description

Indicates the background color which will be used when using the Print Viewer .

DrawLine Method

Applies to

TPrintWin Component

Declaration

procedure DrawLine(XFrom: Real;   YFrom: Real;   XTo: Real;   YTo: Real);

Description

Draws a line on the Printer from position XFrom, YFrom to XTo, YTo. Measurements are in Inches or Centimetre depending on the setting of Units.

3rd Party Product Support

Applies to

TPrintWin Component

TPrintWin currently uses a TDBGrid as the starting point of its information gathering process when it uses any of the window printing methods that can print a grid e.g. DrawWindowMultiple. It looks at the DataSource connected to the TDBGrid and then looks at the DataSet property of the DataSource to determine the TTable or TQuery from which the information must flow.

Suppliers of grid components which are derived from a lower level e.g. from TCustomGrid can contact us to supply print support in the TPrintWin component for their products.

Visible Property

Applies to

<u>TShowTotal</u> Component

Declaration

property Visible: Boolean

Description

Indicates if a component should be displayed on the form.

SetColumnWidth Method

Applies to

TPrintWin Component

Declaration

procedure   SetColumnWidth (Grid: TCustomGrid; ColumnName: string; Width: Real);

Description

The SetColumnWidth method is used to set the absolute width of TDBGrid on the printer. It is used together with the DrawWindowMultiple method to align columns exactly. These measurements are in Inches or Centimetre depending on the setting of Units.

Example

PrintWin1.SetColumnWidth (DBGrid1, 'ItemNo', 0.75);

Types

Unit

CB_Types

Description

All the types in TPrintWin are in unit **CB_Types. If you are coming from an earlier version of Printit then please make sure that this unit is included.**

The following types are used:

    TFrameStyle =   (frThin, frThinThin, frThinThick,frThickThin, frThickThick);
    TPosition =   (poLeft, poCenter, poRight);
    TUnits =   (poInches, poCentimetres);
    TOutput =   (poPrinter, poViewer);
    TOrient =   (Default, Landscape, Portrait);
    TFrameStyles =   (frNone, frSingleThick, frSingleThin, frDoubleThick, frDoubleThin,
frDoubleThickThin,frDoubleThinThick);
    TDBInput =   (frTDBMemo);
    TPageLayout =   (pl_1x1, pl_1x2, pl_1x3, pl_1x4, pl_2x2, pl_2x4);
    TPagesToPrint =   (pAll, pOdd, pEven);

DrawPie Method

Applies to

TPrintWin Component

Declaration

procedure DrawPie(x1, y1, x2, y2 ,x3, y3, x4, y4 : Real);

Description

The Pie method draws the section of an ellipse bounded by the rectangle (x1, y1) and (x2, y2) on the printer. The section drawn is determined by two lines radiating from the center of the ellipse through the points (x3, y3) and (x4, y4). Measurements are in Inches or Centimetre depending on the setting of Units.

DrawRect Method

Applies to

TPrintWin Component

Declaration

procedure DrawRect (YFrom: Real YTo: Real Pos: TPosition; mWidth: Real

Description

The DrawRect method draws a rectangle on the printer between lines YFrom and YTo   All positions and Widths are measured in Inches or Centimetre. Pos may have any of the following values:

      poLeft   - Rectangle will be left aligned
      poCenter   - Rectangle will be center aligned
      poRight   - Rectangle will be right aligned

mWidth determines the width of the rectangle in Inches or Centimetre.   DrawRect draws the rectangle using the current brush and pen attributes.

Measurements are in Inches or Centimetre depending on the setting of Units.

DrawRectAt Method

Applies to

<u>TPrintWin</u> Component

Declaration

procedure DrawRectAt(XFrom: Real; YFrom: Real; XTo: Real; YTo:Real);

Description

The DrawRectAt method draws a rectangle   with its upper-left corner at the point   (XFrom: YFrom) and its lower-right corner at the point (XTo, YTo) . DrawRectAt draws the rectangle using the current brush and pen attributes. Measurements are in Inches or Centimetre depending on the setting of <u>Units.</u>

DrawRoundRect Method

Applies to

<u>TPrintWin</u> Component

Declaration

procedure DrawRoundRect(X1, Y1, X2, Y2, X3, Y3: Real);

Description

The DrawRoundRect method draws a rectangle on a printer with the upper-left corner at (X1, Y1) and the lower-right corner at (X2, Y2), much as the Rectangle method does. However, DrawRoundRect draws the corners as quarters of an ellipse with the width of X3 and a height of Y3. Measurements are in Inches or Centimetre depending on the setting of <u>Units.</u>

DrawTable Method

Applies to

<u>TPrintWin</u> Component

Declaration

procedure DrawTable(YOffset: Real;   Pos: TPosition; Table: TTable; XMinimize: Boolean; PrintTotals: Boolean);

Description

The DrawTable method draws   the Table on the printer starting at YOffset from the top of the printer page. Pos may have any of the following values:

        poLeft   - Table will be left aligned
        poCenter   - Table will be center aligned
        poRight   - Table will be right aligned

If XMinimize is True then TPrintWin will optimize the size of the Table horizontally.

If PrintTotals is True then totals will be printed at the end of the Table. DrawTable currently cannot continue on a new page.

Measurements are in Inches or Centimetre depending on the setting of <u>Units.</u>

DrawTableAt Method

Applies to

TPrintWin Component

Declaration

procedure DrawTableAt(XOffset: Real;   YOffset: Real;   Table: TTable; XMinimize: Boolean; PrintTotals: Boolean);

Description

The DrawTableAt method draws   the Table on the printer starting at position XOffset,YOffset from the top of the printer page.
If XMinimize is True then TPrintWin will optimize the size of the Table horizontally.
If PrintTotals is True then totals will be printed at the end of the Table. DrawTable currently cannot continue on a new page.
Measurements are in Inches or Centimetre depending on the setting of Units.

DrawTableRecord Method

Applies to

TPrintWin Component

Declaration

procedure DrawTableRecord(XOffset: Real;   YOffset: Real;   Table: TTable);

Description

The DrawTableRecord method draw the the current record of the Table vertically starting at position (XOffset, YOffset) Measurements are in Inches or Centimetre depending on the setting of Units.

DrawText Method

Applies to

<u>TPrintWin</u> Component

Declaration

procedure DrawText(YOffset: Real;   Pos: TPosition; vText String);

Description

The DrawText method draws text on the printer starting at line position YOffset.. Pos may have any of the following values:

       poLeft   - Text will be left aligned on the page
       poCenter   - Rectangle will be center aligned on the page
       poRight   - Rectangle will be right aligned on the page

vText is the text that will be printed.
Measurements are in Inches or Centimetre depending on the setting of <u>Units.</u>

DrawTextAt Method

Applies to

<u>TPrintWin</u> Component

Declaration

procedure DrawTextAt(XOffset: Real;   YOffset: Real;   mText: String);

Description

The DrawTextAt method draws text with its upper-left corner at the point   (XOffset: YOffset). mText is the text that will be printed.
Measurements are in Inches or Centimetre depending on the setting of <u>Units.</u>

DrawThickThick Method

Applies to

TPrintWin Component

Declaration

procedure DrawThickThick (x1, y1, x2, y2 : Real);

Description

Draws 2 lines on the printer, one a 4-pixel wide line and the other a 4-pixel wide line. The line is drawn from point (x1,y1) to (x2,y2). The current pen is used. Measurements are in Inches or Centimetre depending on the setting of Units.

DrawThickThin Method

Applies to

<u>TPrintWin</u> Component

Declaration

procedure DrawThickThin   (x1, y1, x2, y2 : Real);

Description

Draws 2 lines on the printer, one a 4-pixel wide line and the other a 1-pixel wide line. The line is drawn from point (x1,y1) to (x2,y2). The current pen is used. Measurements are in Inches or Centimetre depending on the setting of <u>Units.</u>

DrawThinThick Method

Applies to

TPrintWin Component

Declaration

procedure DrawThinThick   (x1, y1, x2, y2 : Real);

Description

Draws 2 lines on the printer, one a 1-pixel wide line and the other a 4-pixel wide line. The line is drawn from point (x1,y1) to (x2,y2). The current pen is used. Measurements are in Inches or Centimetre depending on the setting of Units.

DrawThinThin Method

Applies to

<u>TPrintWin</u> Component

Declaration

procedure DrawThinThin   (x1, y1, x2, y2 : Real);

Description

Draws 2 lines on the printer, one a 1-pixel wide line and the other a 1-pixel wide line. The line is drawn from point (x1,y1) to (x2,y2). The current pen is used. Measurements are in Inches or Centimetre depending on the setting of <u>Units.</u>

DrawWindow Method

Applies to

TPrintWin Component

Declaration

procedure DrawWindow(YOffset: Real;   Pos: TPosition;   Control: TWinControl);

Description

The DrawWindow method draws the contents of a window onto the printer starting at position YOffset..
Pos may have any of the following values:

       poLeft   - Window will be left aligned on the page
       poCenter   - Window will be center aligned on the page
       poRight   - Window will be right aligned on the page

Measurements are in Inches or Centimetre depending on the setting of Units.

This method currently supports the drawing of supported drawing components directly from the screen.

DrawWindowAt Method

Applies to

TPrintWin Component

Declaration

procedure DrawWindowAt(XOffset: Real;   YOffset: Real; Control: TWinControl);

Description

The DrawWindowAt method draws the contents of a window onto the printer starting at position point (XOffset,YOffset). Measurements are in Inches or Centimetre depending on the setting of Units.

Some components are ignored e.g. buttons, menus, scrollbars and non-visual components.

Normally the component that is passed over as the TWinControl is a TScrollBox, TForm or TPanel. All components contained within this TWinControl will be drawn.The vertical distance between edit controls can be set with the LineSpacing property. More than 1 window can be drawn to a printer page. Windows cannot currently continue onto the next page. More than 1 page can be drawn by using the NewPage Method.

This method currently supports the drawing of supported drawing components directly from the screen.

Comboboxes are not drawn in their pull-down state.

TImage and TDBImage currently can only contain bitmaps and not Icons or Windows meta files. These will be supported in a future release.

Measurements are in Inches or Centimetre depending on the setting of Units.

Additional components are constantly added. If you have a special requirement not covered by the above please let us know.

EndPrint Method

Applies to

TPrintWin Component

Declaration

procedure EndPrint;

Description

The EndPrint method must be called at the end of print to close printing.

FrameTableRecord Method

Applies to

TPrintWin Component

Declaration

procedure FrameTableRecord(XOffset: Real;   YOffset: Real;   Table: TTable);

Description

Draws a frame around a record printed with DrawTableRecord.   Measurements are in Inches or Centimetre depending on the setting of Units.

FrameWindow Method

Applies to

TPrintWin Component

Declaration

procedure FrameWindow(XOffset: Real;   YOffset: Real;   Control: TWinControl);

Description

Draws a frame around a window printed with DrawWindowAt. Measurements are in Inches or Centimetre depending on the setting of Units.

GetFontColor Method

Applies to

TPrintWin Component

Declaration

function   GetFontColor: TColorRef;

Description

Retrieves the current font color.

GetFontHeight Method

Applies to

TPrintWin Component

Declaration

function GetFontHeight: Integer;

Description

Retrieves the current font height

GetFontName Method

Applies to

TPrintWin Component

Declaration

function   GetFontName: String;

Description

Retrieves the current font name.

ZoomPercentage Property

Applies to

TPrintWin components

Declaration

property ZoomPercentage: double

Description

Indicates the percentage zoom in the Viewer. Default is 100.

GetWindowBottom Method

Applies to

TPrintWin Component

Declaration

function   GetWindowBottom(XOffset: Integer; YOffset: Integer; Control: TWinControl): Integer;

Description

Retrieves the bottom of a window in pixels..

IsBold Method

Applies to

TPrintWin Component

Declaration

function   IsBold: Boolean;

Description

Returns True if the current font is set to bold.

IsItalic Method

Applies to

TPrintWin Component

Declaration

function   IsItalic: Boolean;

Description

Returns True if the current font is set to italic

IsUnderline Method

Applies to

TPrintWin Component

Declaration

function   IsUnderline: Boolean;

Description

Returns True if the current font is set to underline

Italic Method

Applies to

<u>TPrintWin</u> Component

Declaration

procedure Italic;

Description

Changes the current font to Italic. All other attributes remain the same.

NewFont Method

Applies to

TPrintWin Component

Declaration

procedure NewFont (Name: String; Height: Integer; nBold: Boolean; nItalic: Boolean; nUnderLine: Boolean);

Description

Selects a new font to print text with.

NewPage Method

Applies to

TPrintWin Component

Declaration

procedure NewPage;

Description

Generates a form feed to the printer. It should be called if the programmer wants to draw on a new page.

DrawQuery Method

Applies to

TPrintWin Component

Declaration

procedure DrawQuery(YOffset: Real;   Pos: TPosition; Query: TQuery; XMinimize: Boolean; PrintTotals: Boolean);

Description

The   DrawQuery method draws   the Query on the printer starting at YOffset from the top of the printer page. Pos may have any of the following values:

      poLeft   - Table will be left aligned
      poCenter   - Table will be center aligned
      poRight   - Table will be right aligned

If XMinimize is True then TPrintWin will optimize the size of the Query horizontally.

If PrintTotals is True then totals will be printed at the end of the Query DrawTable currently cannot continue on a new page.

YOffset is measured in Inches or Centimetre depending on Units

Normal Method

Applies to

TPrintWin Component

Declaration

procedure Normal;

Description

Changes the current font to Normal All other attributes remain the same.

SelectFont Method

Applies to

TPrintWin Component

Declaration

procedure SelectFont (Name: String; Height: Integer);

Description

Select a new font.

SelectHatchedBrush Method

Applies to

TPrintWin Component

Declaration

procedure SelectHatchedBrush (Color: Longint; Hatch: Integer);

Description

Selects a hatched brush as the current brush. Valid values for Hatch are

HS_BDIAGONAL
HS_FDIAGONAL
HS_CROSS
HS_DIAGCROSS
HS_HORIZONTAL
HS_VERTICAL

SelectPen Method

Applies to

TPrintWin Component

Declaration

procedure SelectPen (Width:Integer; Color: TColorRef);

Description

Selects a new pen as the current pen.

SelectSolidBrush Method

Applies to

TPrintWin Component

Declaration

procedure SelectSolidBrush (Color: Longint);

Description

Select a new solid brush as the current brush.

SetFillObjects Method

Applies to

TPrintWin Component

Declaration

procedure SetFillObjects (Fill: Boolean);

Description

Indicates if objects e.g. arcs should be filled with the current brush.

SetFrameStyle Method

Applies to

TPrintWin Component

Declaration

procedure SetFrameStyle(Style: TFrameStyle);

Description

Sets the frame which will be used to draw certain objects. Options are:
frThin, frThinThin, frThinThick,frThickThin or   frThickThick

SetTheTextColor Method

Applies to

TPrintWin Component

Declaration

procedure SetTheTextColor (Color: TColorRef);

Description

Sets the color which will be used for printing text.

Underline Method

Applies to

TPrintWin Component

Declaration

procedure Underline;

Description

Changes the current font to underline All other attributes remain the same.

SourceGrid Property

TShowTotal Component

Declaration

property SourceGrid: TDBGrid;

Description

Indicates the TDBGrid which will be used to determine how many pages should be output e.g. on an Invoice. It is ONLY used together with the DrawWindowMultiple method of TPrintWin. The SourceField property must also be set. If this property is used then property TotalType should be set to either tPageTotal (which will display the PageTotal for the specific field) or to   tAccTotal (which will display a running total of the specific field). These totals are calculated at the beginning of the page.

TShowTotal Component

Unit Totals

Description

The TShowTotal component is used (usually together with the DrawWindowMultiple method of TPrintWin) to generate output to the printer. This component can output page and running totals for each column in a TDBGrid. This option is currently **ONLY** available when used together with the DrawWindowMultiple method. It keeps the totals automatically. The SourceGrid and SourceField options must be set for it to function. If they are not set then the contents of the Text property will be displayed.

It can also output text aligned any way desired and has full color capabilities. By setting the property ShowOn , the component knows on which pages of the printout it must appear and on which not. It hides or shows itself automatically. By setting the property ShowOnForm, the programmer can determine if the component should appear on the form that is displayed to the end-user.

The TotalType property indicate what output should be shown. The DisplayFormat property is used mainly for formatting currency and integer fields. The Alignment property indicates how the contents should be aligned within the border.

GetRunningTotal Method

Applies to

TPrintWin Component

Declaration

function   GetRunningTotal   (Grid: TCustomGrid; ColumnName: string): Real;

Description

Returns a running total of a column in a TDBGrid of all the previous pages plus the current one. The total is already available at the beginning of the page. This option is used together with the DrawWindowMultiple method which is used to print Invoices, statements ,etc. The total is also available if a TShowTotal component is used.

Font Property

Applies to

TShowTotal Component

Declaration

property Font: TFont

Description

Indicates the font which will be used to display text in the component.

GridBackDrop Property

TPrintWin Component

Declaration

property GridBackDrop**: Boolean;**

Description

Indicate if grid rulers should be printed on the output. This is handy for designing the layout of the printed page. It is used together with GridBackDropUnits

DrawQueryRecord Method

Applies to

<u>TPrintWin</u> Component

Declaration

procedure DrawQueryRecord(XOffset: Real;   YOffset: Real;   Query TQuery);

Description

The DrawQueryRecord method draw the the current record of the Query vertically starting at position (XOffset, YOffset). Measurements are in Inches or Centimetre depending on the setting of <u>Units.</u>

HeaderStringCenter Property

Applies to

TPrintWin component

Declaration

property HeaderStringCenter: **string;**

Description

Indicates the string that will be printed in the top center of the page.

Print Viewer

The PrintViewer is built into the PrintIt! components and can   view and print files that are generated by PrintIt!. It is called from within the PrintIt! components.

It looks in the current directory for all metafiles beginning with PRN and displays them on the screen. It has built in functions like ZOOM, PAN etc.

The following settings can be done from a TPrintWin which customizes the Print Viewer. ViewBkColor and ViewHeading.

ShowOnForm Property

Applies to

<u>TShowTotal</u> Component

Declaration

property ShowOnForm: Boolean;

Description

Indicates if the component should be shown on the form.

DisplayFormat Property

Applies to

TShowTotal Component

Declaration

property DisplayFormat: string;

Description

Indicates the format a TDBGrid field will be displayed. Used primarily for real and Integer fields together with the DrawWindowMultiple method.

Interrupted Property

Applies to

TPrintWin Components

Declaration

property Interrupted   Boolean;

Description

Indicates if the prepare of the printout or the printing on the printer was interrupted. Default is False.

TOrient Type

Declaration

property Orientation TOrient;

Description

Indicates the orientation of the output on either the Viewer or the printer.

This can take on the following values

Value	Meaning
Default	The print job uses the previous setting of the orientation
Landscape	The print job prints horizontally on the page
Portrait.	The print job prints vertically on the page

Note: If this value is to be set during runtime, call it **before** calling BeginPrint

TOrient

Orientation Property

Applies to

<u>TPrintWin</u> components

Declaration

property Orientation <u>TOrient</u>;

Description

Indicates the orientation of the output on either the Viewer or the printer.

This can take on the following values

Value	Meaning
Default	The print job uses the previous setting of the orientation
Landscape	The print job prints horizontally on the page
Portrait.	The print job prints vertically on the page

Note: If this value is to be set during runtime, call it **before** calling BeginPrint

PageNumberEnabled Property

Applies to

<u>TPrintWin</u> components

Declaration

property PageNumberEnabled Boolean

Description

Indicates if the Page Number must appear on the right bottom of the printout. The default value is True

YOffset Property

Applies to

<u>TVRuler</u>   component

Declaration

property YOffset: Real;

Description

Indicates the distance from the top of the parent window. If negative then only the positive part of the ruler will be displayed. It displayes measurements in Inches or Centimetre depending on the settings of the <u>Units</u> property.

Text Property

Applies to

<u>TShowTotal</u> Component

Declaration

property Text: string;

Description

Indicates the text that will be displayed in the component.

HeaderStringRight Property

Applies to

TPrintWin component

Declaration

property HeaderStringRight: **string;**

Description

Indicates the string that will be printed in the right top corner of the page.

DrawGrid Method

Applies to

TPrintWin Component

Declaration

procedure DrawGrid(x, y: Integer; Width, Height: Real;   xDim, yDim: Integer);

Description

Draws a grid with the top left at x,y. Each block is Width wide and Height high. XDim x yDim is the dimension of the Grid.

Measurements are in Inches or Centimetre depending on the setting of Units.

BitBlt Method

Applies to

TPrintWin Component

Declaration

procedure   procedure BitBlt(XOffset: Real;   YOffset: Real;   Width: integer;Height: Real;   FileName: String);

Description

Draws a Bitmap by using a file as defined in FileName. If Width and Height are both 0 then then Height and Width of the bitmap will be used as read from the file.

If Height and Width are not 0 then the bitmap will be stretched to fit the rectangle

Measurements are in Inches or Centimetre depending on the setting of Units.

DrawWindow Supported Components

The following basic components can be drawn onto the printer:

TEdit,
TDBedit
TMaskEdit,
TLabel,
TDBText,
TMemo,
TDBMemo,
TCombobox,
TDBCombobox
TDBLookupCombo,
TDBGrid,
TImage,
TDBImage,
TBevel,
TPanel,
TForm,
TScrollBox
TShape,
TGroupBox,
TRadioGroup,
TCheckBox,
TRadioButton,
TStringGrid
TNoteBook (ActivePage)

In most cases the properties of the components themselves are used e.g. the fonts and colors. Component contents cannot continue onto the next page so they must fit in a single page.

The exception is the following:

The DrawWindowMultiple allows the contents of a TDBGrid to continue onto the next page. This is used mainly for printing Invoices, Job Cards, statements etc. The Invoice or statement page is setup using the normal Delphi interface by creating the form on the screen. A new component has been added which displays page and running totals which are automatically calculated by TPrintWin. This component is the TShowTotal component. Page and running totals are available already at the beginning of the page so any necessary settings can be done in the OnPrintHeader event. All supported components will appear on all pages. The TShowTotal component can be made to appear on selected pages as selected by its ShowOn property.

HeaderStringLeft Property

Applies to

TPrintWin component

Declaration

property HeaderStringLeft: **string;**

Description

Indicates the string that will be printed in the left top corner of the page.

HeaderFont Property

Declaration

property HeaderFont: TFont;

Description

Indicates the font that will be used to print the Header at the top of the page.

SourceField Property

Declaration

property SourceField: string;

Description

Indicates a FieldName in the TDBGrid. The TShowTotal component will display either a PageTotal or a Running total depending on the setting of the TotalType property. It is ONLY used together with the DrawWindowMultiple method of TPrintWin. The SourceGrid property must also be set. If this property is used then property TotalType should be set to either tPageTotal (which will display the PageTotal for the specific field) or to tAccTotal (which will display a running total of the specific field). These totals are calculated at the beginning of the page.

BorderStyle Property

Applies to

TShowTotal Component

Declaration

property BorderStyle: TBorderStyle;

Description

Indicates if a border should be drawn around the edge of a component. It can be bsNone or bsSingle.

DrawWindowMultiple Method

Applies to

TPrintWin Component

Declaration

procedure   DrawWindowMultiple(XOffset, YOffset: Real; Control: TWinControl);

Description

The DrawWindowMultiple is used to print forms like Invoices, Job Cards, statements etc. It automatically determines if it must go over onto multiple pages. It usually works together with the TShowTotal component to enhance its capabilities. To print a multiple page Invoice, etc. requires no more than a few lines of programming - usually +- 10. To accomplish this, eveything is set with properties.

The XOffset and YOffset parameters are used to offset the page on the printer. These measurements are in Inches or Centimetre depending on the setting of Units.

The Control can be any of the following:
        TForm,
        TPanel
        TScrollBox

All descendents will be drawn except components like buttons, scrollboxes, scrollbars, checkboxes, etc. See the list of currently supported components .

TShowTotal Properties

SourceGrid
SourceField
BorderStyle
Color
Font
Visible
TotalType
DisplayFormat
Text
ShowOn
Alignment
ShowOnForm

GetTextHeight Method

Applies to

TPrintWin Component

Declaration

function GetTextHeight (str: string): Real;

Description

Returns the Height of the string in Inches or Centimetre depending on the setting of Units.

GetControlWidth Method

Applies to

TPrintWin Component

Declaration

function GetControlWidth (Control: TWinControl): Real;

Description

Returns the Width of the control in Inches or Centimetre depending on the setting of Units.

GetControlHeight Method

Applies to

TPrintWin Component

Declaration

function GetControlHeight (Control: TWinControl): Real;

Description

Returns the Height of the control in Inches or Centimetre depending on the setting of Units.

GetPageHeight Method

Applies to

TPrintWin Component

Declaration

function   GetPageHeight: Real;

Description

Returns the Height of the Page in Inches or Centimetre depending on the setting of Units.

GetPageWidth Method

Applies to

TPrintWin Component

Declaration

function   GetPageWidth: Real;

Description

Returns the Width of the Page in Inches or Centimetre depending on the setting of Units.

Support Information

Support is available from the following:

E-mail:	Johan.Calitz@kagi.com
Internet home page	http://ourworld.compuserve.com/homepages/calitz
Fax	+27 12 342 5269