Report Designer Training

Printed on 6 May, 2015

Contents

Report Designer Overview 4

RD Design Window - elements 5
Report Designer - Design Window 6
Report Designer Band Selection 9
Report Designer - Band Properties 11
Code Editor 14
Report Designer Components 15
Component Properties 17
Label Components 18
Expression Components 19
Text Properties 20
Shape Components 22
Picture Components 24
Memo Components 25
Bar Code Components 26
Report Designer Naming Conventions 28
Report Designer Objects 29
Report Designer Functions 30
Report Designer Global Variables 31
Report Designer Preferences 32
Report Designer Report Properties 33
Report Designer - View All Code 34
Report Designer Wizard 35
GL Financial Report Designer 36
Financial Report Designer Objects 38
Financial Report Designer Functions 39
GL Design Wizard 40
AR Statement Designer 43
AR Statement Designer Objects 44
IC Transfer Designer 45
IC Product Sheet Designer 46
IN Invoice Designer 47
IN Invoice Designer Objects 48
IN Invoice Designer Functions 49
OE Packing Slip Designer 50
OE Packing Slip Designer Objects 51
OE Packing Slip Designer Functions 51
AP Cheque/Remittance Designer 52
AP Cheque/Remittance Designer Objects 52
AP Cheque/Remittance Designer Functions 52
AP Shipment Designer 53
AP Shipment Designer Objects 53
PO Purchase Order Designer 54
PO Purchase Order Designer Objects 54
JC Job Sheet/Quote Designer 55
JC Job Sheet/Quote Designer Objects 56

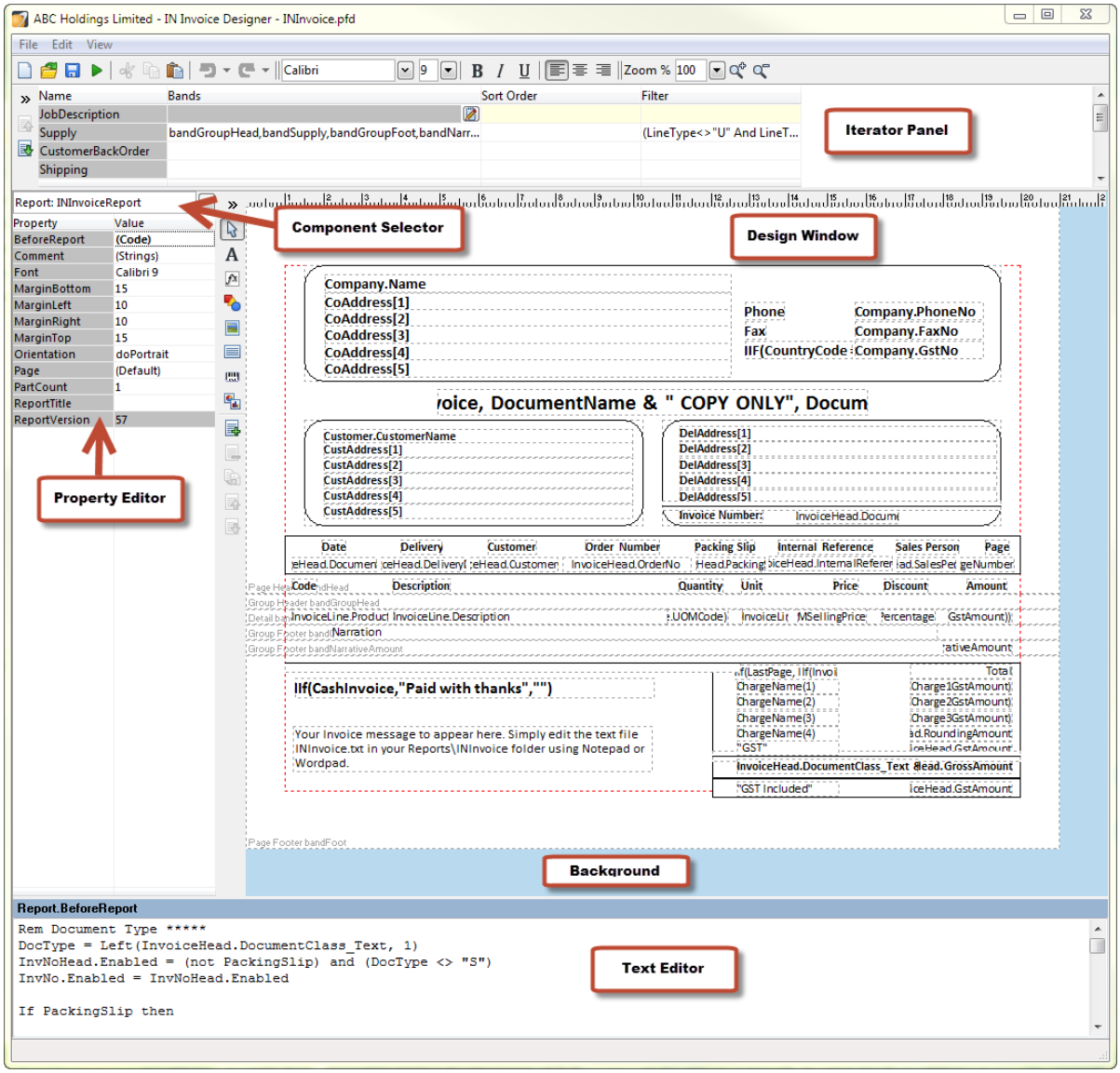
Label Designer 57

Report Designer Overview

Components and functionality are the same for all report designers, the difference being the records the designer selects and then iterates. Information may be drawn from Accredo for all reports via MaxBasic scripting at the data level. Report Designers are available for,

Designer	**Type**	**Module Required**
Statement	Document	Accounts Receivable
Customer Label	Label	Accounts Receivable
Product Label	Label	Inventory Control
Transfer	Document	Inventory Control (Saturn Only)
Product Sheet	Masterfile	Inventory Control
Invoice	Document	Invoicing System
Invoice Label	Label	Invoicing System
Packing Slip	Document	Order Entry
Order Label	Label	Order Entry
Cheque/Remittance	Document	Accounts Payable
Shipment	Document	Accounts Payable
Creditor Label	Label	Accounts Payable
Purchase Order	Document	Purchase Orders
Purchase Order Label	Label	Purchase Orders
Asset Label	Label	Fixed Assets
Financial Report	Financial Report	General Ledger
Job Sheet/Quote	Document	Job Costing
Custom Report	Custom Report	Report Designer
Report Types		
Documents	Select the document header and lines, then iterate through the document lines. For some documents multiple iterators are available, e.g., for IN Invoices, JobDescription: job description lines in Job Costing and the invoice related to a job Supply: the invoice lines BackOrder: a summary of items on backorder for the customer in Order Entry Iterators for documents are listed in the order they are iterated through. You can apply a sort to an iterator to control the order of the lines within the iterator, and/or a filter to restrict the lines iterated through.	
Labels &Masterfiles	Select the masterfile record. e.g., IC Product.	
Financial Reports	Iterators are specified for the report, usually by running *GL Design Wizard* (on page 39), where they may be entered or edited. Iterators select a range of GL accounts to iterate though.	
Custom Reports	Iterate through an SQL query that selects and orders information. Query results may be cloned, manipulated, and replaced prior to iterating them.	

RD Design Window - elements



Report Designer - Design Window

Navigator > Setup > Report Designer

Select or develop an SQL Query using the **Edit Query** button before you design a report.

Reports are made up of Bands laid on the page in a sequence determined by the Band type. Components are placed in Bands, and then properties are applied to the components. See *Report Designer Band Selection* (on page 9).

GL Financial Report Designer (on page 35) and Report Designer include wizards, that help you build bands and fields to design a report. Click **Wizard** to use the wizard to generate a report.

- In the Design Window, you can lay out reporting bands and their associated components. A report design consists of one or more bands containing components.
- *Components* (on page 15) are printable items placed on bands in the Design Window, see *Component Properties* (on page 17).

Main menu

File Menu	Some file menu options are also displayed on the Menu toolbar, see below. You can also **Add To Navigator** to create a shortcut for the report, or **Print Setup** to set printer options.
Edit Menu	You can use shortcut keys. You can also right-click on objects to bring up the edit menu options.
View Menu	You can show or hide the Property Editor, Iterators and *Code Editor* (on page 14). *View All Code* (on page 34) replaces Report Designer windows with a single multi-panel view of the MaxBasic code. **Preferences** opens the *Report Designer Preferences* (on page 32).

Menu toolbar

New (Ctrl+N)	Create a new report.
Open (Ctrl+O)	Open an existing report.
Save (Ctrl+S)	Save the report. On save, the previous design version is retained as a backup copy. The backup copy has the original design file name with the extension **.BAK**. Previous backups of the design file will be renamed to increment the backup extension **.BAK** to **.BK1**, **.BK1** to **.BK2** and so on, through to **.BK8** to **.BK9**. The oldest backup, previously **.BK9** will be overwritten. Recover previous versions by loading the backup file and saving it under the correct file name.
Generate using wizard	Only available for Report Designer and *GL Financial Report Designer* (on page 35). See *Report Designer Wizard* (on page 35).
Execute Report (Ctrl+R)	Run the report. You can test against the number of records specified in *Report Designer Preferences* (on page 32). Results are shown on the screen in Report Preview.

Iterator Panel (Custom Reports)

Query Bands Select the query bands to be included when the report is produced.

Edit Query Edit the SQL Query for the report. Opens the Report Designer - Edit Query form.

Iterator Panel (Document Designers)

The fields for a pre-defined panel are:

Name	Iterator name, indicating the iterator's use. For referring to iterators in MaxBasic code, add the prefix "**it**" to the name (for example, **itLines**).
Bands	Select the Detail Bands from the Design Window to use to render the data for this iterator. Normally there would be a single band per iterator but multiple bands are permitted, usually when a band is optional, depending on the data being printed. To select (or reorder) the bands for an iterator, click **Open Narrative Editor** (F2) to show band details for the iterator.
Sort Order	Iterators that iterate over multiple records provide optional sorting of those records. To add a sort, click **Open Code Editor** (F2).
Filter	To apply a filter to select a subset of the available records, click **Open Code Editor** (F2).

Property Editor

The Property Editor shows the property settings for the component selected in the Design Window. If more than one component is selected, properties for the selected components are shown. Components can also be selected from the drop down at the top of Property Editor (listed alphabetically).

Code Properties Code properties display **(Code)** as their **Value** in the Property Editor. To view the code:

- Click **Open Code Editor** (F2) in the **Value** field to open the *Code Editor* (on page 14) and build MaxBasic expressions.
- Code is displayed in the Code Editor panel at the bottom of the Report Editor.

Code Editor is available for the:

- **BeforeReport** code segment of a Report.
- **BeforeBand** and **AfterBand** code segments of a Band.
- **Expression** property of an Expression component.
- **Text** property of a Label component.
- **MemoPath** property of a Memo component.
- **PicturePath** property of a picture component.

Users Property Click **Open Narrative Editor** (F2) in the Users property of the Report to edit User List of users who can access the report.

Palette

To design a report, place components in the Design Window, then apply properties to the components.

Expand Toolbar (Ctrl+F9)	Expand the toolbar to give access to all toolbar options. Press Esc to close the expanded toolbar.
Select pointer	Use the pointer to select and move objects in the Design Window.
Add new label	Add a *label* (on page 18).
Add new expression	Add an *expression* (on page 19).
Add new shape	Add a *shape* (on page 22).
Add new picture	Add a *picture* (on page 24).
Add new memo	Add a *memo* (on page 25).
Add new bar code	Add a *bar code* (on page 26).
Add new graph	Add a graph.
Insert band (F4)	Insert a band.
Duplicate band (Shift+F4)	Duplicates a selected band.
Move band	Select a band to move higher or lower on the page.
Delete Band (F3)	Delete a selected band.

Report Designer Band Selection

Navigator > Setup > Report Designer

Reports are made up of bands laid on the page in a sequence determined by the Band type. Bands are separated by a light line across the page width. Bands must be named; you can change band names. The naming convention for bands is to prefix the name with '**band**', for example **bandHeader**. By default, Labels for the Band type and band name appear in grey. Band name positioning is determined from *Report Designer preferences* (on page 32).

The *Design Window* (on page 6) Toolbar provides buttons to **Insert**, **Duplicate**, **Move** and **Delete** bands.

Bands have *properties* (on page 11). To select a band, click the band in the Design Window, or select the Band Name from the drop down at the top of the Property Editor. If a component is selected, select it's band by pressing `Shift+Esc` to select the component's parent. When you select a band, the properties will appear in the Property Editor.

Band Types

The Band Type (**BandType**) determines the print order of bands, regardless of where bands appear in the Design Window.

Watermark	Prints before other bands have been printed on the page.
Page Header	Prints first at the start of every page.
Title	Prints after the Page Header only on the first page of the report.
Column Header	Prints before Detail Bands on each page. It is usually used for column headings.
Group Header	Prints at the start of a new group.
Detail band	Prints once for each record in the report.
Group Footer	Prints at the end of a group.
Summary	Prints once on the last page of the report after all detail bands.
Page Footer	Prints last at the end of every page.
Overmark	Prints after all other bands have been printed on the page.

Band Selection

Detail, **Group Header** and **Group Footer** bands must be selected in the **Query bands** (Custom reports) or **Iterators** (Document designers) before they will iterate when the report is run.

Click **Open Narrative Editor** `(F2)` on the **Query bands** selection or Iterator **Bands** field to select bands. Within an Iterator, bands are executed in the order they are listed in Band selection, use the Move Item Up / Move Item Down arrows to order the bands.

The **Execute Report** `(Ctrl+R)` button checks and warns if any **Detail**, **Group Header** and **Group Footer** bands are not selected. The warning is not triggered when the report or document is Run outside the designer.

OK	Cancel Execute report and select the bands.
Ignore	Continue Execute report ignoring the warning.
Cancel	Cancel Execute report.

Band Order

The ordering or bands on the printed report depends on the band types, see above. For example, it makes no difference if a **Page Footer** band appears in the Design Window before or after a **Page Header** band as the precedence of the printed output of these bands is already determined.

The order of the bands in the Design Window is only used for the report when the above ordering does not determine the band order. This applies if you have more than one band of a given type. Then for **Detail, Group Header** and **Group Footer** bands (iterated bands), ordering is selected within the query bands or iterators. For other than **Detail, Group Header** or **Group Footer** bands (non-iterated bands), the order within the Design Window applies. For example, if you have two Page Header bands they will both be output at the top of each page but in the order shown in the Design Window.

Bands can be turned on and off using the **Enabled** property during report generation. You can have more than one band of a given type to provide a way to turn sections of the report on or off during report generation (using the band's Enabled property).

Watermark and **Overmark** bands cannot be exported to a spreadsheet or text file.

Report Designer - Band Properties

Navigator > Setup > Report Designer

Band properties control the behaviour of the bands placed in the Design Window. Properties are set using Property Editor. You can also drag to set size properties in the Design Window.

AfterBand Programming code executed by the report after the band is printed, commonly used for calculating totals, see MaxBasic.

AfterCalculateBand Programming code that is executed after **BeforeBand** code is performed, and after all components in the band are calculated.

For example, this can be used when custom reports need to break calculated expression text into lines when **AutoHeight** and **WordWrap** are true. After **BeforeBand** code is performed, and all component texts (produced by expressions) and heights are calculated, it is possible to extract line break information. The text component (label or expression) now has object Lines with property LineCount and method GetLine(i).

For example:

```
dim lines
dim someLine
dim someLineCount
lines = SomeNamedExpression.Lines
someLineCount = lines.LineCount
if someLineCount>0 then
rem Getting the last line
someLine = lines.GetLine(someLineCount - 1)
end if
```

A **Text** component has the following properties that can only be reliably used only in **AfterCalculateBand**, except for static labels:

- **TextWidth** - width of non-wrapped text (even if WordWrap is true).
- **TextWrappedWidth** - exact width of wrapped text (it may differ from component width).
- **TextHeight** - height of non-wrapped text (if text contains carriage return line feed, line height will be actual text height of two or more lines).
- **TextWrappedHeight** - exact height of wrapped text (may differ from component height).

Alignment Applies to **Watermark** and **Overmark** bands, other band types ignore this property. This property allows **Watermark** and **Overmark** bands to be placed on appropriate parts of a page without the need to accurately size the band to the page size.

- **avTop** - Align band to top of page
- **avBottom** - Align band to bottom of page
- **avCenter** - Centre band vertically on page

AlignWithMargins When set to **True**, the component will align with the page margins.

AutoHeight When set to **True**, the band changes its height if it contains Components with **AutoHeight True** property. The band's height also preserves the gap between closest bottom boundary of components and the bottom of the band. Only applies to affects **Detail**, **Group Header**, **Group Footer** and **Summary** bands.

BandType The type of band:

- **btWatermark** - Watermark Band
- **btTitle** - Title Band
- **btPageHeader** - Page Header Band
- **btColumnHeader** - Column Header Band
- **btGroupHeader** - Group Header Band
- **btDetail** - Detail Band
- **btGroupFooter** - Group Footer Band
- **btPageFooter** - Page Footer Band
- **btSummary** - Summary Band
- **btOvermark** - Overmark Band

See *Report Designer Band Selection* (on page 9).

BeforeBand Programming code executed by the report before the band is printed, used for calculating values to be printed in the band. See MaxBasic for details on writing code.

Enabled **False**, the band will not print and its BeforeBand and AfterBand code will not be executed. It is usually set only while the report is running to conditionally make a band unavailable.For example, if the **AfterBand** code sets **Enabled** to **False**, it ensures the band only prints once (as after that it would be unavailable).

ExportRowCount Used to export reports to an Excel spreadsheet, CSV or tab delimited text file. It specifies the minimum number of lines to output for the band. For example, specifying **3** ensures the band uses at least three lines in the spreadsheet or output file. Text components placed on the band need the *ExportField and ExportRow* (on page 20) properties set to determine their position in the spreadsheet or export file.

Font Font for the printed output. Click **Open Narrative Editor** (F2) to select the font, style, size and characteristics. Click the font buttons on the toolbar to change fonts.

This can be overridden if the **ParentFont** property is **True**, see below.

ForceNewPage **True**, a new page will always be started before this band is printed.

Group Expression Applies to **Group Header** and **Group Footer** bands. A group break will apply when the expression entered changes in value.

Height The height in millimetres. A band's height must allow components placed in the band to be visible. Sometimes it is useful to have a band with a height of zero. Such a band cannot contain components and will not print on the report, but the BeforeBand and AfterBand code will execute. For example you could have a report that only prints data in a Summary Band but calculates the summary information across all records using the BeforeBand and AfterBand code on a zero height Detail band.

Name Bands have names, allocated when created, such as **Newband1**. We recommend changing the name to something meaningful to you, see *Report Designer Naming Conventions* (on page 28). Bands can only be referred to by name if they adhere to variable name conventions (the name can be a variable name). A named band can be:

- Selected from the drop down list at the top of Property Editor,
- Referred to in programming code written in the report and you can change properties on the band during generation of the report.

OnFirstLastPage Only applies to **Page Header** and **Page Footer** bands.

True, the band will be printed on the first and last pages.

False, a Page Header band will not be printed on the first page and a Page Footer band will not be printed on the last page.

ParentCustomHint **True**, the Custom Hint from the parent (the report) is used.

ParentFont **True**, the band gets font information from the font of its parent (the report).

False, the band uses its own Font property.

Setting to **True** means you can change the report font and have all components on the band (that also have ParentFont set to **True**) change to the same font.

SplitAcross For **Detail**, **Group Header**, **Group Footer** and **Summary** bands this controls whether the band can be split across two pages if it will not fit in the space remaining, or started on the new page.

When a band splits the split line goes between components (if and where it is possible). Only expression components (with several lines of text) are split between lines.

For other band types, such as **Page Header**, **Page Footer**, **Watermark** and **Overmark**, SplitAcross is always false. If Autoheight is true and the band won't fit in the space available, it is truncated.

Width The width of the band. All bands on a report have the same width.

Code Editor

Open by double-clicking a component in the *Design Window* (on page 6), or select the component, press `F2` or `Alt+DOWN`. Enter MaxBasic code, or the value of an expression property. Or, select an item from a menu to insert in Code Editor at the pointer position, you can construct statements and expressions. Code Editor in Report Designer is modal, the code "belongs" to the band property or the expression being edited.

Click to build expressions and write MaxBasic code. For report design, this button is located in Property Editor on the,

- Code properties (BeforeBand, AfterBand) of bands
- Code property (BeforeReport) of the report
- Expression property of expressions

See also Script Editor and Script Editor Shortcut Keys.

Report Designer Components

Navigator > Setup > Report Designer

Report Designer Components are printable items placed on bands in the Design Window. You can manipulate components in the *Design Window* (on page 6).
Right-click a Component to see the Context Menu.

Placing Components

To place components in the Design Window:

- Click the required component in the Palette toolbar;
- Click in the relevant band in the Design Window.

The component will appear in the band in the Design Window.

To place multiple components of the same type:

- Press and hold the `Shift` key, then click the component in the palette.
- Click in the relevant band in the Design Window to add a component.
- Continue to click to add as many extra components as required.
- Once you have added the components, click the **Pointer** in the palette.

Once a component has been placed on a band, you can set its properties in Property Editor. Position and Size properties can be changed by dragging the component handles.

Double-click a component in the Design Window to open *Code Editor* (on page 14) to view and change properties.

Selecting Components

Click a component to select it. To select multiple components, press and hold `Shift` while selecting. If multiple components are selected, the component resize handles appear dimmed, internal to the components.

To select multiple components that are near each other, press and hold down the `Ctrl` key, click outside a component, then drag to create a rectangle covering the components. Release the mouse button and the covered components are selected.

You can combine multi-select `Shift` with `Ctrl` to select or unselect a set of components.

`Ctrl+A` selects all components on the selected band or component. If no band or component is selected, `Ctrl+A` selects all components on all bands. You can also select **Select All** from the right-click menu.

Moving Components

To move components, click and drag them. Components cannot be dragged outside the boundaries of the band they belong to. You can multi-select components from more than one band and move them all. This is useful when you have components lined up in a field across multiple bands and want to move the field.

Selected components can be "nudged" 0.1mm by holding down `Ctrl` while pressing `Up`, `Down`, `Left` or `Right`.

Right-click > **Move**, you can move components by specifying the distance in mm. Positive numbers move to the right horizontally and down vertically. To move to the left or up, enter negative numbers.

Resizing Components

If a single component is selected, resize it by dragging the handles. To set a number of components to the same size, multi-select and set the size in Property Editor.

Aligning Components

Right-click can be used to align components. Select the components, then right-click and select **Align**. You can position the components relative to margins. The second group allows them to be aligned to the nearest grid cell (set from Main menu > View > Preferences) or to change the order of overlapping components. The third group aligns and sizes multiple components relative to each other.

Converting Labels to Expressions

You can convert labels to expressions. Select the label component, then right-click and select **Convert Label to Expression.**

Component Properties

Navigator > Setup > Report Designer

You can place components in the Design Window. Some properties can be set from the Design Window using the mouse or toolbar, others are set in Property Editor or *Code Editor* (on page 14). The properties common to all components are:

Enabled

False, the component will not be printed on the report. Set to **False** while you design and test a report to temporarily remove the effect of the component.

Name

Components can be named, see *Report Designer Naming Conventions* (on page 28). A named component can be:

- Selected from the drop down at the top of Property Editor
- Referred to in programming code written in the report. Named components are available from the **COMPONENTS** button in *Code Editor* (on page 14).

Components can only be referred to by name if the name adheres to the same conventions as variables, see MaxBasic valid variable name.

Size Properties (Height, Width)

Sizes shown are in millimetres. These properties can be entered in Property Editor or set by dragging the handles of a selected component in the Design Window.

Position Properties (Left, Top)

These determine where in a report band the component will print. The Top property is relative to the top of the band. The Left property is relative to the left edge of the physical paper. The position must be within the printable region of the paper for the printer being used.

Transparent

True, components printed "underneath" this component will be visible in the white space. This is used for components placed over graphic images.

Label Components

A Label is a text component designed to allow text to be placed on a report.

See also:

- *Text Properties* (on page 20) for properties common to all text components.
- Report Designer *Component Properties* (on page 17) for properties common to all components, such as position and size.

Label components have the following properties:

AutoWidth **True**, the components width will be set to the correct amount for the text to fit the usual option.

Text You can enter text to print on the label by typing in the **Text** property in Property Editor. Double-click a Label component to open Code Editor. You can embed 'New Line' characters in Label components by pressing `Ctrl+Enter`.

Expression Components

Expression components are used to display the results of MaxBasic expressions. They can be used to display single data fields on reports, or can be used to display results of an expression that results in a string of characters and / or numbers. Expressions are the most commonly used component.

See also:

- *Text Properties* (on page 20) for properties common to all text components.
- *Component Properties* (on page 17) for properties common to all components, such as position and size.

Expression components have the following properties:

Expression The full text of the MaxBasic expression which is evaluated when the report is printed. You can type the expression directly in Property Editor, type it in Code Editor at the bottom of the Report Designer window, or click **Open Code Editor** (F2) from the **Expression** property of Property Editor to build the expression from the menu drop downs in *Code Editor* (on page 14). Double-click an expression component to open the *Code Editor* (on page 14).

If an expression's value is numeric (including any Foreign Exchange, Amount, Price, or Percent), the component is not **AutoWidth**, and not **WordWrap**, and the formatted text does not fit into the component width, all characters except decimal and thousand separators are replaced with ? and the resulting string is truncated according to the component alignment. This only applies to text components with Angle 0.

The effect is that custom reports, financial reports and documents will behave like report layouts. If a number will not display completely this is made obvious by showing ???????.??

Format A string of characters that determines how the result of the expression is formatted on the printed report.

Text Properties

See also:

- *Label Components* (on page 18)for properties specific to labels
- *Expression Components* (on page 19) for properties specific to expressions
- *Component Properties* (on page 17) for properties common to all components, such as position and size

Text components (including Labels and Expressions) have the following properties:

Alignment

Determines how the text is aligned (left or right) within the bounds of the component.

taLeftJustify	Text is left justified within the component.
taCenter	Text is centred within the component.
taRightJustify	Text is right justified within the component.

The above property value constants are available for use within MaxBasic.

AlignWithMargins

When set to **True**, use the component will align with the page margins.

Angle

The angle to the horizontal for the printable text. Acceptable values are integers between 0 and 359. An angle of 90 will result in the text printing vertically upwards, 270 will print vertically downwards.

AutoHeight

True, the component height will be set to the correct amount for the text to fit (based on the selected font).

Border Properties (BorderBottom, BorderLeft, BorderRight, BorderTop)

You can place borders around text components. This is useful for drawing boxes around components or separating components from each other with lines.

rbNone	Do not print a border.
rbSingle	Print a single solid line border.
rbDouble	Print a double solid line border.
rbDashed	Print a single dashed line border.

The above property value constants are available for use within MaxBasic.

ExportColumn

ExportColumnWidth

ExportRow

Use these properties when exporting a report to an Excel spreadsheet or a CSV or tab delimited text file. For the component to be exported, **ExportColumn** and **ExportRow** must be greater than 0. The ExportColumn specifies the column of the spreadsheet or text file to contain the output. ExportRows greater than 1 are only used if the band is designed to output multiple lines to the spreadsheet or text file. **ExportColumnWidth** can be used to specify the column width. The number of lines output for a band would be the maximum ExportRow of component on a band or the *ExportRowCount* (on page 9) property of the band.

Font

Determines the font of the printed output. Click **Open Narrative Editor** `(F2)` to select the font, style, size and characteristics. You can change the font by clicking the appropriate buttons on the toolbar. If you change the font, the **ParentFont** property (see below) will be set to **false**. The font properties - Name, Size, Colour, Bold, Underline, Italic and Strikeout can be accessed from MaxBasic code during a report. The font can be changed while a report is running to identify certain types of data.

Font Color

See Color Property.

ParentCustomHint

True, the Custom Hint from the parent is used.

ParentFont

True, the component gets font information from the font of its parent (the band that it is placed on). Setting this property to True means you can change the font of a band (or the entire report) and have all components on that band (or the report) change to the same font.

False, the component will use its own font property.

WordWrap

True, if the amount of text in the component exceeds the width of the component, the text will wrap to new lines on word boundaries.

False, if the amount of text in the component exceeds the width of the component, the component width will be extended to fit the text.

Shape Components

See also Report Designer *Component Properties* (on page 17) for properties common to all components, such as position and size.

Shape components have the following properties:

BrushColor The colour used to fill the shape. The BrushColor is stored as a hexadecimal number. Type this number, or click **Open Narrative Editor** (F2). See Color Property.

BrushStyle The pattern used to fill the shape. Predefined styles are:

Property	Pattern
bsSolid	Fill with solid colour
bsClear	No fill. Changing to this changes the BrushColor to clear (#FFFFFF).
bsHorizontal	Fill with horizontal lines.
bsVertical	Fill with vertical lines.
bsFDiagonal	Fill with diagonal lines (top left to lower right).
bsBDiagonal	Fill with diagonal lines (lower left to top right).
bsCross	File with horizontal and vertical line cross pattern.
bsDiagCross	File with diagonal line cross pattern.

Corner Height, Corner Width These apply to the round rectangle shape. Determines the curvature on the round corners.

Line Position Applies the horizontal and vertical line shapes.

Property	Alignment
taLeftJustify	Line is positioned to the left (vertical) or top (horizontal) of the component.
taCenter	Line is positioned in the centre of the component.
taRightJustify	Line is positioned to the right (vertical) or bottom (horizontal) of the component.

Pen Colour Determines the colour of the lines drawn as the boundaries of the shape. Type this number in directly, or click **Open Narrative Editor** (F2). See Color Property.

Pen Style Determines the type of lines drawn as the boundaries of the shape.

Pen Style	Line Type
psSolid	A solid line.
psDash	A dashed line.
psDot	A dotted line.
psDashDot	A line of alternating dashes and dots.
psDashDotDot	A line of alternating dashes and pairs of dots.
psClear	No line.

Pen Width Determines the width (millimetres) of the boundary line for the shape.

Shape Type Possible Shape Types,

Shape Type	Shape
stRectangle	Square or Rectangle.
stCircle	Circle or Ellipse.
stVerticalLine	Vertical line in the middle of the shape.
stHorizontalLine	Horizontal line in the middle of the shape.
stRoundRect	Rectangle with rounded corners.

Picture Components

You can incorporate pictures into a report. The picture must be stored in a suitable format file. The Picture component stores a link to the file, it does not embed the picture. All users who will access the report will need access to the location of the picture file.

See also Report Designer *Component Properties* (on page 17) for properties common to all components, such as position and size.

Picture components have the following properties:

AutoHeight
AutoWidth
True, the components height and width will be set to the correct amount for the picture to fit the usual option.

LockAspectRatio
True, when you resize, the picture maintains its height to width ratio.

False, you can stretch or compress the image horizontally or vertically.

PicturePath
The directory path and name to the picture file. Supported file types are:

Extension	File Type
***.jpg**, ***.jpeg**	JPEG Image File
***.bmp**	Bitmaps
***.ico**	buttons
***.emf**	Enhanced Metafiles
***.wmf**	Metafiles
***.tiff**	Tagged Image File Format

Specify the full file path or click **Select File** `(F2)` to browse for a picture. Double-click a picture component to open the browser. If you include a picture in a report, the picture file must reside on the disk when the report is run.

Memo Components

A Memo is a component designed to allow text or rich text from a file to be placed on a report.

See also Report Designer *Component Properties* (on page 17) for properties common to all components, such as position and size.

Memos support some (Alignment, Font and ParentFont) but not all (Angle, AutoHeight, Border, ExportRow, ExportField) of the standard *Text Properties* (on page 20).

WordWrap is available.

Memo components have the following property:

MemoPath The directory path and name to the file containing the memo text.

Standard text (*.txt) and rich text (*.rtf) files are supported. Note, the Font and ParentFont properties are ignored for rich text format files as these contain embedded font information.

Specify the file path or click **Select File** (F2). Double-clicking a memo component opens the browser. If you include a memo in a report, the memo file must reside on the disk when the report is run.

Bar Code Components

A Bar code component is designed to show a standardised bar code type. There are many different bar code standards, and industry standards for the data included in a bar code. Accredo provides a common subset of the available bar code types, and assumes that data provided for the bar code contents is correct for the required use. We suggest that if high quantity, or very small, bar code printing is required, a specialist bar code font should be used. Contact the scanner equipment supplier for recommendations.

See also Report Designer *Component Properties* (on page 17) for properties common to all components, such as position and size.

Bar code components have the following properties:

BarcodeType

bt2of5	2of5Barcode (interleaved 2 of 5) is a numbers-only bar code. The symbol can be as long as necessary to store the encoded data. The code is a high-density code that can hold up to 18 digits per inch when printed using a 7.5 mil X dimension. "Interleaved" comes from the fact that the digit is encoded in the bars and the next digit is encoded in the spaces. There are five bars, two of which are wide and five spaces, two of which are wide.
EAN13	EAN (International Article Number) bar code is identical to the UPC (Universal Product Code), except for the number of digits. EAN has a length of 13 digits: 3 prefix digits, 9 identifier digits, and 1 check digit. This bar code is typically used for Non-U.S coding. The check digit is calculated for you so you do not need to enter it when placing a value into the Expression property.
code39	code39 is an alphanumeric bar code that can encode decimal numbers, the uppercase alphabet, and the following special symbols "_", " . ", "*", "$", "/", "%", and "+". The characters are constructed using nine elements, five bars and four spaces. Of these nine elements, two of the bars and one of the spaces are wider. Wide elements represent binary ones (1), and narrow elements represent binary zeros (0).
code39Extended	As for code39 but using an extended character set.
code128A	code 128 bar code is a very high-density alphanumeric bar code. The symbol will be as long as necessary to store the encoded data. It is designed to encode all 128 ASCII characters and will use the least amount of space for data of 6 characters or more of 1-D symbology. Each data character is made up of 11 black or white modules. The stop character is made up of 13 modules. Three bars and three spaces are formed out of these 11 modules. Bar and spaces vary between 1 and 4 modules. The following are the ASCII representations of special codes that can be needed: FNC1 = #241, FNC2 = #242, FNC3 = #243, FNC4 = #244, codeA = #245, codeB = #246, codeC = #247, SHIFT = #248.
code128B	code 128 using code Page B
code128C	code 128 using code Page C

BarWidth This property sets the width of the narrowest bar.

Expression The text of the MaxBasic expression that is evaluated when the report is printed. Type the expression in directly to the Expression property of Property Editor, or click **Open Code Editor** `(F2)` from the **Expression** property of Property Editor to build the expression from the menu drop downs in Code Editor. Double-click a bar code component to open Code Editor.

PrintReadable **False**, you do not want readable text to be printed along with the barcode.

UseSelectSum Specifies if a checksum character should be included in the barcode. Some barcode types have a mandatory select sum that will be included regardless.

WideFactor The wide factor is the ratio of the wide bar to the narrow bar width.

Report Designer Naming Conventions

Elements or objects in a report design have a Name property. While it is permissible to have spaces and special characters in names, it is not recommended, as the names do not adhere to the variable naming standards and cannot be referenced in MaxBasic code.

Reasons for the Name property are:

- So objects can be referenced within MaxBasic code,
- So error messages can name problem components, making error tracking easier,
- To provide a meaningful lookup in Property Editor.

Accredo supplied reports and documents adhere to the following Name prefixes:

Component Type	Naming Prefix	Example
Iterator	it	**itLines**
Band	band	**bandHeader**
Expression	e	**eTotalBalance**
Label	lbl	**lblOrderDate**
Memo	memo	**memoInvoiceMessage**
Pictures (images)	img	**imgLogo**
Shapes	sh	**shSenderBox**
MaxBasic Variables	(none)	**Total**

Report Designer Objects

Navigator > Setup > Report Designer > Code Editor > **Objects** button

You can use standard MaxBasic objects.

Some of the objects available in Report Designer Code Editor include:

Company	Details of the Company such as the Company name and address.
Report (on page 33)	Report options include details of the report, such as the font and margins.
User	Various values for the current User, such as User name and Settings.
Bands	Each band you add to a report is an object. You can include details from the different bands.

Report Designer Functions

Navigator > Setup > Report Designer > Code Editor > **Functions** button

You can use standard MaxBasic functions.

Some additional functions available in Report Designer Code Editor include:

LastPage	Returns True if the current page is the final page of the report, or False.
PageHeight	Physical page height. This is useful for positioning/sizing components relative to the end of the page.
PageNumber	Active printing page number.
PageRemaining	Page space remaining to print on.
PageWidth	Physical page width - useful for positioning/ sizing components relative to the right hand edge of the page.
PartNumber	Returns the PartNumber for multi part forms.
ReportDate	Some reports allow setting of a ReportDate - this function will return that date, if set, or null. See also the Date function in MaxBasic functions.
ReportDestination	Returns the selected destination for the report or document. The same text strings as are in the list of available destinations in report selections.
ReportTitle	Returns the ReportTitle property of the Report object.
SelectBin(BinName: String)	Allows printer bin (tray) selection for a print job. BinName is a text string exactly as the bin name appears in the printer properties. Note that this will only function correctly before printing has begun on a page, that is, in the BeforeReport code or in the PageFooter of the previous page. Sample BeforeReport code: `If PartNumber = 2 then SelectBin("Tray 2")`

Report Designer Global Variables

Global variables are available for document style reports, such as Invoices and Statements.

PartCount (on page 33)	Provides support for multi-part documents, for example if you have a Customer copy and an Office copy. This can be set as a property on the report object, for example if PartCount is set to 2, two copies of each document are printed. The two copies do not need to be identical, you can use MaxBasic code to conditionally change the document based on the PartNumber function. The PartCount variable can be set in MaxBasic code to allow the number of parts to vary, based on the data reported. See also Add Watermarked Second Page to Invoice Tutorial.
PrintDocument	This variable is set to **True** before executing the **BeforeReport** code. In this code it can be set to **False** to prevent printing this document. Its behaviour is similar to the *Print* (on page 11) property on a Band except that it applies to the entire document. It allows filtering of the documents to print from inside the report.
ExportRow **ExportColumn**	Report properties that control the column and rows used for printing a report to Excel. This is different from a Component's **ExportRow/Export column** property in that it is global to the entire report.

Report Designer Preferences

Navigator > Setup > Report Designer > Main menu > View > Preferences

Grid

These options allow you to show and use a grid in the *Report Designer Design Window* (on page 6).

If **Snap To Grid** is **Selected** and components are dropped onto the report, moving and resizing is done in grid increments (GridX and GridY).

Band Name Position

Determines the position of the light grey band name in the Design Window. It can be moved to a position that interferes least with the visual display, can be turned off by selecting **None.**

Record Limit

When previewing reports for design purposes, you may not want to wait for the entire report to be generated. You can limit the number of records that are reported on to speed up previewing. The Record Limit is usually set to:

- **No limit**, for GL Financial Reports and Custom Reports.
- **Limit test records** to a recommended maximum of no more than 20, for documents, labels and masterfile sheets.

Report Designer Report Properties

As well as bands and components, a report has a number of properties. To access the Report properties from the Design Window, click outside the design area, or press `Shift+Esc`, or select the Report from the drop down option.

Report Properties	
AfterQuery	Code that executes immediately after the SQL Query is run, see MaxBasic.
BeforeReport	Code that executes before the report is started for initialising variables used elsewhere in the report, see MaxBasic.
Comment	You can enter documentation or comments with no effect on the generation of the report.
Font	Determines the font of the printed output. Click **Open Narrative Editor** `(F2)` to select the font, style, size and characteristics. The purpose of setting a font for a report is that all bands that have the ParentFont property set to True will use the reports font. This saves having to individually set the font for each band (and ultimately each component on each band). You can change the font by clicking the font buttons on the toolbar.
MarginBottom **MarginLeft** **MarginRight** **MarginTop**	Set margins for the report (millimetres). The margins are shown in the Design Window as red dashed lines. You can place components outside the margins and they will print if within the printable area of the printer. Margins are useful for aligning components using right-click. If the margins are outside the printable area, they appear in the Design Window at the maximum printable area for the printer.
Orientation	Select **doPortrait** or **doLandscape** for portrait or landscape orientation. Report.Orientation property can be set from BeforeReport code allowing you to switch between Portrait and Landscape on the fly. Report.Orientation = 0 gives Portrait Report.Orientation = 1 gives Landscape.
Page	To set the page size for this report design, click **Open Narrative Editor** `(F2)`. Set a value other than the Default Paper Size when designing reports to print on non-standard size pre-printed forms, for example, 8½" continuous invoice forms. When the report is run, Accredo will attempt to select the required paper size - if the printer being used has support for that paper size (it may not if the report is run on a different printer from the one used at design time).
PartCount	Refers to the number of parts (copies) of the form or report to be generated. It can be set to a positive integer value (default 1). In code, it can be set using the PartCount global variable, thereby allowing a decision on the number of parts to be made during report generation. The PartNumber function can be used in expressions or code to allow different information to be shown on different parts, for example, an expression like IIf(PartNumber = 1, "Customer Copy", "Office Copy") would print "Customer Copy" on part 1 and "Office Copy" on all other parts.
Report Title	This value is accessible using the **ReportTitle** function.
Report Version	Shows the report version number.
Users	Lists users with access to the report. See Report Designer - User List.

Report Designer - View All Code

Navigator > Report Designer > Main menu > View > View All Code

View All Code replaces Report Designer with a multi-panel window showing the MaxBasic code segments. The **BeforeReport**, **AfterQuery**, and every band **BeforeBand** and **AfterBand** code is shown. Bands that contain no code are minimised panels with the caption unavailable (shaded). You can edit the code and preview the report.

Click **Maximise** or **Minimise** to view or hide each code segment.

Click **Open Code Editor** `(F2)` to access Code Editor for the selected code segment. The menu options are the same as Report Designer *Code Editor* (on page 14).

To return to the main window, select **View All Code** from the View menu to clear the option.

Toolbar	
All Events	**Selected**, shows all Code events.
	Clear, only code events that contain code will appear; those with a grey caption are hidden.
Scroll Bars	**Clear**, the horizontal scroll bars are not shown on the panels, you must use the keyboard to scroll, this provides more room to view the code.

Report Designer Wizard

Navigator > Setup > Report Designer > **Wizard** button

After you create a SQL query, use Report Designer Wizard to build bands and fields, assign bands to an iterator, and create a report you can modify in the *Design Window* (on page 6).

Report Title	Enter the title to appear on the printed report.
Selections Title	If the report SQL Query has parameters, the user will be prompted for the parameters when the report is run. The **Selections Title** will display as the title of the selections form.
Retain BeforeReport Code	Retain BeforeReport Code in the generated report (that is, the report that appeared in the Report Designer before opening the Report Designer Wizard). This prevents the Report Wizard making unwanted changes to the BeforeReport Code. When **Selected**, the Selections tab will be Read Only.
Retain AfterQuery Code	Retain AfterQuery Code in the generated report (that is, the report that appeared in the Report Designer before opening the Report Designer Wizard). This prevents the Report Wizard making unwanted changes to the AfterQuery Code.
Columns tab	The grid shows fields selected from the SQL Query Builder. Fields marked **Show** in the Query Builder are selected as **Visible** in the Wizard.
Selections tab	If the report SQL Query has parameters, these will be shown on the Selections tab grid. Order and set values for the parameters.
Generate (F9)	The Wizard builds bands and fields and assigns bands to the iterator, then returns you to the Design Window. From there, you can execute the report to test and edit.
Cancel (Esc)	Close the Report Designer Wizard and discard changes.

GL Financial Report Designer

Navigator > Setup > General Ledger > Financial Report Designer

The GL Financial Report Designer is based on the Report Designer.

To create a report design, we recommend you open an existing report and modify it, or use the GL Design Wizard. Click to open the *GL Design Wizard* (on page 39).

For complex reporting, ask Accredo or your QSP for training or to design reports using MaxBasic.

Reports are created for the current GL Period. To view or change the reporting period, from the GL Financial Report Designer window, select:

- ACCREDO > View > Reporting Period.

Choose a period or click **OK.**

Iterator panel

The iterator panel determines the accounts and reporting bands. The panel has the following fields:

Name Name the iterator; referred to in the report band as **Iterator.Name**.

Comment Document the iterator purpose to include on the report as an **Iterator.Comment** - use this to include headings, consolidated names, and totalled groups of accounts.

Branch
Department Specify the Branch and / or Department if required.

Segment 1
Segment2 Specify ranges for accounts and sub-accounts to determine the accounts to include on the report for this Iterator line. A range is specified as, `value1[-value2]`

Value1-value2 specifies the range of values applicable to the iterator. An asterisk (*) can be used as a wild card specifying all accounts or sub-accounts. Examples,

Range	Values Selected
* in Segment 1	All accounts
9000-9500 in Segment 1	All accounts with a main account number between 9000 - 9500.
@1500.000 in Segment 1 where 1500.000 is a Total account	All accounts which add directly to account 1500.000
@@5500.000 in Segment 1 where 5500.000 is a Total account	All accounts which add to account 5500.000 whether directly or via another total account.
001-010 in Segment 2	All accounts with a sub-account number between 001 - 010

If no Branch, Department, Segment 1 or 2 specified, the Iterator line will be output once - this is useful for adding headings to the financial reports.

Sort By Branch, Department and segments, (B, D, 1, 2) to use as the primary sort key. For example, if you enter "1, B" accounts are sorted by main account number (Segment 1) followed by Branch.

Consolidate By Branch, Department and segments (B, D, 1, 2) to consolidate by. If no value is entered, accounts will be not be consolidated. For example, if you enter B, all Branches will be consolidated, if you enter B, D then all Branches and Departments will be consolidated. You can consolidate over sub-accounts (Segment 2) or over main accounts (Segment 1).

Selection This can contain a MaxBasic expression that determines if an account is included in the selected range. If it is omitted all accounts will be included. If a selection is entered, the account will be included if the selection expression returns the value **True**. Type the expression or click **Open Code Editor** `(F2)` to build it using *Code Editor* (on page 14).

Band Output for every account specified by the Iterator, right-click or `Shift+F10`

Sign An optional Debit or Credit specifier on the iterator. In the band, you can access the Debit or Credit field of an account as Account.Sign (Debit = +1, Credit = -1). The additional Sign field on the iterator is useful when no accounts are specified in the range or when the accounts can include both debit and credit accounts. This allows a single band to deal with the sign correctly for both Debits and Credits.

Level A non-negative integer, usually used as a total level indicator that allows a single total band to function for different levels of totalling. It is referenced in the band as **Iterator.Level**

Iterator.Level is used for alternate accounts when using report totalling.

Iterator Toolbar

Insert `(F4)` Insert a line to add a new iterator.

Duplicate `(Shift+F4)` Duplicates the selected report.

Move `(Shift+Up)` `(Shift+Down)` Select an Iterator and move it higher or lower on the list.

Delete `(F3)` Deletes the selected Iterator.

Print `(Ctrl+P)` Print a list of all Iterators.

Customise `(Alt+F5)` Opens Customise Fields, you can customise the fields visible in the grid.

Financial Report Designer Objects

Objects available in the GL Financial Report Designer in addition to the standard objects and *Report Designer objects* (on page 29) are:

Account Contains financial and other account or consolidated account information

Iterator The line from the iteration panel of the report.

Iterators The collection of the iterators.

- **property** Count: Number read only
- **method** Append
- **method** Delete(Index: Number)
- **method** Empty(Index: Number)
- **method** GetPropertyValue(PropertyName: String): Variant
- **method** Insert
- **method** Item(Number): String default read only
- **method** PropertyType(PropertyName: String): String
- **method** SetPropertyValue(PropertyName: String, Value: Variant)

Financial Report Designer Functions

Functions available in the GL Financial Report Designer in addition to MaxBasic functions are:

- **Period Functions,** functions to manipulate periods.

See also *GL functions* (on page 39).

General Ledger functions

Function	Description
BudgetActivity	Budget activity for a period or period range.
BudgetOpening	Budget opening balance for a period.
GetAccount	Specified account object.
HasBudgetActivity	Returns true if there is budget activity for a period or period range.
HasBudgetOpening	Return true if there is an opening balance for the budget.
HasPeriodActivity	Returns true if there is activity for a period or period range.
HasPeriodBalance	Returns true if there is a balance for a period.
HasPeriodBudget	Returns true if there is a budget for a period or period range.
HasPeriodOpening	Returns true if there is an opening balance for a period.
HasPeriodProjected	Returns true if there is a projected balance for a period range.
HasYearBalance	Returns true if there is a balance for year to period.
HasYearBudget	Returns true if there is a budget for year to period.
HasYearProjected	Returns true if there is a projected balance for year to period.
PeriodActivity	Activity for a period or period range.
PeriodBalance	Period balance.
PeriodBudget	Budget for a period or period range.
PeriodOpening	Opening balance for a period.
PeriodProjected	Projected balance for a period range.
YearBalance	Balance for year to period.
YearBudget	Budget for year to period.
YearProjected	Projected balance for year to period.

GL Design Wizard

Navigator >Setup > General Ledger > Financial Report Designer > **Wizard** button

Use the GL Design Wizard to design financial reports. The Wizard will format the report and generate the required MaxBasic code to run the report.

If you access GL Design Wizard from an existing report, the settings are retained. Accredo will validate the GL on opening. If the GL is not valid, a dialog will appear. If this happens:

1. Close **GL Financial Report Designer**.
2. Go to Navigator > Tasks > General Ledger > Validate Ledger.
3. A Validation Report is produced, listing the Account Number, Name and a Description for each error in the GL. Take the necessary steps to repair the GL. Contact your QSP or Accredo Support if necessary.
4. Once the GL is valid, return to the GL Design Wizard.

Where GL Design Wizard gets information from

Reports styles are based on Report Preferences, set in Settings. The GL Design Wizard retrieves Heading and Total account names from the current Account. Details for Heading accounts appear in the Iterator panel of the *GL Financial Report Designer* (on page 35) as follows:

- **Name** – shows the current Account Name
- **Comment** – shows the current Account number used to retrieve the account name when the report is run. When consolidating by Segment 1 or 2, Account Names, and Numbers are also retrieved.

How to use GL Design Wizard

Accredo provides Definition files for a number of standard financial reports that can be loaded and edited. Alternatively you can create a new Report. Report definition files can be saved. The default path is Accredo\Reports\GLFinancial, the default file type is Design Files (.pfd).

Report Title — This will be inserted into the **ReportTitle** property of the designed report.

Report Style — Two report styles are available:

- **Array totalling and manual ranges** - totalling is based on manually specified ranges of accounts.
- **Chart based totalling and ranges** - totalling and ranges in the report are based on information in the General Ledger Chart Of Accounts.

Load... (Alt+L) — Load an existing GL Report Wizard file to use for designing different reports.

Save... (Ctrl+S) — Save the current wizard settings as a GL Report Wizard file. You can reload the file in the wizard to refine or create a new report.

Generate (F9) — Generate a GL Report definition based on current selections in the wizard and the structure of the Chart Of Accounts. GL Financial Report Designer will show the code for the report, you can further refine and run a test. The wizard retains selections. You can re-open the wizard and save or change the settings. The wizard settings are also saved when you save a GL Report Design.

Cancel (Esc) — Closes the wizard without saving settings or changes made since the last save, and without generating a new code in GL Financial Report Designer.

GL Design Wizard - Iterators tab

Navigator > Setup > General Ledger > Financial Report Designer > **Wizard** button > Iterators tab

Account From	Specify the range of accounts to report on.
Account To	**Clear**, the first and last accounts are selected.
Consolidate Branches	**Selected**, sets the **Consolidate By** field on the designed report.
Branch	Select an individual branch to report across, or enter a valid range, for example, AKL, WGN to report across both Auckland and Wellington branches. **Clear**, all branches are included.
Consolidate Departments	**Selected**, sets the **Consolidate By** field on the designed report.
Department	Select an individual department to report across, or enter a valid range. **Clear**, all departments are included.
Consolidate Segment 2	**Selected**, sets the **Consolidate By** field on the designed report. Segment 2 is the last 3 digits of an account number.
Segment 2	Select an individual segment 2 to report across, or enter a valid range (for example, *12 to report all Segment 2 ending in 12). **Clear**, all segment 2 values are included.
Budget	Select an individual budget to report on.
Selection	To limit a report to accounts, branches, departments and / or segments based on a more complex filter, use **Open Code Editor** (F2) to apply filters.
Prompt for Branch **Prompt for Department**	Select to set a prompt for Branch or Department in the report selection. These are included in the page header when the report is printed.
Prompt Consolidate Segment 2	Prompts whether or not to Consolidate Segment 2 in Selections Form - this selection is included in the page header when the report is printed. **Selected**, Consolidate Segment 2 with Prompt Consolidate Segment 2 will treat Consolidate Segment 2 as the default for the prompt. The code for these selections is added to the report whether or not they are selected, then turned on or off as appropriate via a boolean flag.
Prompt For Budget	Select to prompt for a Budget in the report selection. This is included in the page header when the report is printed.
Consolidated Account Format	You can choose between 4 digit and 4.3 digit format for account codes where the report has been consolidated by segment 2.

GL Design Wizard - Bands tab

Navigator > Setup > General Ledger > Financial Report Designer > **Wizard** button > Bands tab

Use the Bands tab to select and order columns to appear on the report.

Include Nil Balance Accounts

Selected, accounts with all financial fields as zero will be included in the report.

Clear, these accounts are omitted.

This sets the state for the IncludeNilBalances variable at the top of the BeforeReport code.

Amount Decimals, Percent Decimals

Select the decimal accuracy for financial and percentage fields.

Retain Existing Bands

Retain Existing Bands in the generated report (that is, the report that appeared in GL Report Designer before opening the GL Design Wizard). If you have written new code and / or substantially changed code in GL Report Designer, and you want to generate iterators using the GL Design Wizard, this prevents unwanted changes to bands.

Include Array Based Total Code

Selected, the Array Based Total code will be available in the GL Financial Report Designer. Only do this if you intend to make extensive modifications to the report generated by the Wizard. You will require the array based totalling code to do this.

Clear, (default).

Page Orientation

Select from:

- **Automatic**
- **Portrait**
- **Landscape**

Automatic will choose the orientation based on fitting columns on the page, with the font size still being readable.

Report columns grid

Contents

Specify content for a field on the report, choose a range of values from the Lookup . See GL Design Wizard Band Contents Fields.

Label

Enter a heading that will print at the top of the column on the report. A number of label characters convert to MaxBasic functions, for example,

- **Period|Activity** will wrap 'Activity' to the next line
- **%PeriodName%** will fetch the correct name for the period

Width

The column width on the report. The width shown in the grid is measured as a number of 0 characters in the same way the column width on report layouts is measured. This is translated into millimetres when the report is generated.

Code Only

Includes the code used to calculate the field without including the result as a field on the report. The calculation will be available in the BeforeBand code in the GL Financial Report Designer. You can use it as a raw figure for other calculations, for example, to calculate the balance for a period as a percentage of the budget.

Budget

Select the budget for the field.

Branch

Dept

Use Branch and Department to design cross tab (across the page) style reports, specifying branch and / or department codes per field. If you select a branch and / or department in the grid, you must consolidate branches and / or departments. The Wizard will select the relevant consolidation box(es) on the Iterators tab.

AR Statement Designer

Navigator > Setup > Accounts Receivable > Statement Designer

You can design your own statements or open and modify an existing statement design. To design a statement quickly, start with an existing layout and modify it.

Full report design facilities including MaxBasic options are available.

The AR Statement Designer is based on the Report Designer and has similar functionality.

Usually a statements consists of:

- **Header band** showing details of the Customer and statement date,
- **Repeating Detail band** for transactions, and
- **Footer band** for totals.

An additional **Outstanding** iterator is available for open item accounts, to print outstanding or overdue transactions.

Iterator objects allow setting of the **SortBy** property in the **BeforeReport** code.

AR Statement Designer Objects

AR Statement Objects include the standard report *objects* (on page 29).

To print Invoice detail on statements, two further **iterators** are included:

- **Current Invoice Line,** iterates across the Invoice lines for the transaction in the Current iterator (if it is an Invoice and the original Invoice is retained in the Invoice history).
- **Outstanding Invoice Line,** iterates across the Invoice lines for the transaction in the Outstanding iterator (if it is an Invoice and the original Invoice is retained in the Invoice history).

Objects available in the statement designer in addition to the standard *objects* (on page 29) include:

Object	Contains
BillFrom	Fields from the Customer the transaction was entered against.
Branch	Fields from the Branch the Customer is attached to.
Company	Fields from the Company.
Contact	Fields from the Contact.
Customer	Fields from the Customer for the statement (the "billed to" Customer).
DeliveryAddress	Fields from the delivery address.
InvoiceHead	Fields from the original source Invoice header.
InvoiceLine	Fields from the original source Invoice line.
itCurrent	Properties of the Current iterator.
itCurrentInvoiceLine	Properties of the CurrentInvoiceLine iterator.
itFuture	Properties of the Future iterator.
itFutureInvoiceLine	Properties of the FutureInvoiceLine iterator.
itOutstanding	Properties of the Outstanding iterator.
itOutstandingInvoiceLine	Properties of the OutstandingInvoiceLine iterator.
SalesPerson	Fields from the Sales Person.
Transaction	Fields from the transaction.
User	Fields from the User.

IC Transfer Designer

Transfers and the Transfer Designer are available for Accredo Saturn only.

Navigator > Setup > Inventory Control > Transfer Designer

A transfer document can be included with transferred items to allow easy checking of quantities and other details. You can design your own transfer documents or open and modify an existing transfer document design. To design a transfer document quickly, start with an existing layout and modify it.

Full report design facilities including MaxBasic are available.

The IC Transfer Designer is based on the Report Designer and has similar functionality.

Usually a transfer document consists of:

- **Header band** showing details of the source, in-transit and / or destination locations
- **Repeating Detail band** showing product codes, descriptions, quantities sent and received, and
- **Footer band** with space for a signature and date.

Iterator objects allow setting of the **SortBy** property in the **BeforeReport** code.

Objects available in the Transfer designer in addition to the standard *objects* (on page 29) are:

DestinationLocation	Fields from the Destination Location in the transfer header.
itLines	Properties from the Lines iterator.
Product	Fields from the Product (for the Product on the line).
SourceLocation	Fields from the Source Location in the transfer header.
TransferHead	Fields from the transfer header.
TransferLine	Fields from the transfer line.
TransitLocation	Fields from the Transit Location in the transfer header.
User	Fields from the User.

Menu Options

MENU > View > Reporting Period

Select a period for the report.

IC Product Sheet Designer

Navigator > Setup >Inventory Control > Product Sheet Designer

You can design your own product sheets or open and modify an existing product sheet design. To design a product sheet quickly, start with an existing layout and modify it.

Full report design facilities including MaxBasic are available.

The IC Product Sheet Designer is based on the Report Designer and has similar functionality.

Objects available in the Product Sheet Designer in addition to the standard *objects* (on page 29) are:

Component Fields from the Component record.

Product Fields from the Product record.

UOM Fields from the UOM record.

IN Invoice Designer

Navigator > Setup > Invoicing System > Invoice Designer

Design Invoice layouts, Credits, Quotes and Packing Slips generated from Invoices. You can design your own invoice documents or open and modify an existing invoice document design. To design an invoice document quickly, start with an existing layout and modify it. Packing Slips produced from orders entered in OE are different and require *OE Packing Slip Designer* (on page 50).

Full report design facilities including MaxBasic are available.

The IN Invoice Designer is based on the Report Designer and has similar functionality.

Usually an invoice document consists of:

- **Header band** showing customer details and invoice number
- **Repeating Detail band** showing invoice lines, and
- **Footer band** for totals.

Additional iterators are available:

- **CustomerBackOrder** to print summary information of Back-orders for the customer held in OE
- **InvoiceBackOrder** to print summary information of Back-orders relating to orders that this invoice is for
- **JobDescription** to print the Job description for invoices with a default Job Code.

Iterator objects allow setting of the **SortBy** property in the **BeforeReport** code.

Menu Options

MENU > View > Reporting Period

Select a period for the report.

IN Invoice Designer Objects

Objects in addition to the standard *objects* (on page 29) are:

Contact	Fields from the Customer Contact records. If a Contact has been specified, this object is populated with the information associated with the document. If no Contact is specified, this object is populated with the primary contact information (if specified).
Customer	Fields from the Customer record.
CustomerBackOrder	Fields from the Back-order summary records for the Customer.
DeliveryAddress	Fields from the delivery address records.
InvoiceBackOrder	Fields from the Back-order summary records for orders relating to the invoice.
InvoiceHead	Fields from the Invoice header record.
InvoiceLine	Fields from the Invoice line records.
itBackOrder	Properties of the BackOrder iterator.
itDescription	Properties of the JobDescription iterator.
itSupply	Properties of the Supply iterator.
Job	Fields from the Job (if a JC Invoice).
JobDescription	Fields from the Job description records (if a JC Invoice).
JobTransaction	Fields from the Job transaction records (if a JC Invoice).
Product	Fields from the Product specified in the Invoice line.
ProductQty	Fields from the quantity for the Product specified in the Invoice line.

IN Invoice Designer Functions

Report functions available in addition to the standard MaxBasic functions are:

CashInvoice	A Boolean function that returns True if the invoice is printed as part of processing as a cash sale. This function could be useful to allow a message such as "Paid, Thank You" to be printed on cash sale invoices.
ChargeName (charge)	A function that returns the name of the charge specified by the parameter charge which must be in the range 1-4.
CopyInvoice	A Boolean function that returns True if Print as Copy is selected when reprinting invoices. This allows the words "Copy Only" or similar to be printed on copy invoices.
PackingSlip	A Boolean function that returns True if the invoice is printed as a Packing Slip.

OE Packing Slip Designer

Navigator > Setup > Order Entry > Packing Slip Designer

You can design your own packing slips or open and modify an existing packing slip design. To design a packing slip quickly, start with an existing layout and modify it. Packing Slips produced from invoices entered in IN differ, and require *Invoice Designer* (on page 47).

Full report design facilities including MaxBasic are available.

The OE Packing Slip Designer is based on the Report Designer and has similar functionality.

Usually a packing slip consists of:

- **Header band** showing details of the customer and packing slip number.
- **Repeating Detail band** for lines, and
- **Footer band** for totals.

An additional **BackOrder** band to print summary information for all back-orders is also available.

Iterator objects allow setting of the **SortBy** property in the **BeforeReport** code.

Menu Options

MENU > View > Reporting Period

Select a period for the report.

OE Packing Slip Designer Objects

Objects available in the Packing slip designer in addition to the standard *objects* (on page 29) are:

BackOrder	Fields from the Back-order summary records.
Contact	Fields from the Customer Contact records. If a contact has been specified, this object is populated with the information associated with the document. If no contact is specified, this object is populated with the primary contact information (if specified).
Customer	Fields from the Customer record.
DeliveryAddress	Fields from the delivery address records.
itBackOrder	Properties of the BackOrder iterator.
itSupply	Properties of the Supply iterator.
OrderHead	Fields from the Order header record.
OrderLine	Fields from the Order line records.
Product	Fields from the product specified in the Order line.
ProductQty	Fields from the quantity for the product specified in the Order line.

OE Packing Slip Designer Functions

Functions available in addition to the standard MaxBasic functions are:

ChargeName (charge)	Returns the name of the charge specified by the parameter charge which must be in the range **1-4**

AP Cheque/Remittance Designer

Navigator > Setup > Accounts Payable > Cheque/Remittance Designer

A cheque can include a remittance section, cheques are Remittance Advices with an additional cheque section. You can design your own cheque/remittance documents or open and modify an existing cheque/remittance document design. To design a cheque/remittance document quickly, start with an existing layout and modify it.

Full report design facilities including MaxBasic are available.

The AP Cheque/Remittance designer is based on the Report Designer and has similar functionality.

Usually a cheque/remittance document consists of:

- **Header band** showing details of the creditor
- **Repeating Detail band** for transactions, and
- **Footer band** for totals.

Iterator objects allow setting of the **SortBy** property in the **BeforeReport** code.

AP Cheque/Remittance Designer Objects

Objects available in the Remittance Designer in addition to the standard *objects* (on page 29) are:

Creditor	Fields from the Creditor record.
Contact	Fields from the Contact records.
itTransactions	Properties from the Transactions iterator.
Transaction	Fields from the transaction record.

AP Cheque/Remittance Designer Functions

Useful functions available in addition to the standard MaxBasic functions are:

Environment/ ChequeNo	The number for the current cheque. This is passed in by Accredo at the start of a cheque run and incremented for each successive page. This is only useful for Cheque documents.
Environment/ GstRegistered	A Boolean function that returns True if a GST Basis of invoice or payments is set in GST Settings.
String/WordAmount (number)	Returns a string containing number converted to an amount in words. This is mainly used on cheques.

AP Shipment Designer

Navigator > Setup > Accounts Payable > Shipment Designer

You can design Shipment document layouts for checking or documenting details of entered shipments. You can design your own shipment documents or open and modify an existing shipment document design. To design a shipment document quickly, start with an existing layout and modify it.

Full report design facilities including MaxBasic are available.

The AP Shipment Designer is based on the Report Designer and has similar functionality.

Usually a shipment document consists of:

- **Header band** showing details of the creditor
- **Repeating Detail band** for shipment lines
- **Footer band** for totals.

Iterator objects allow setting of the **SortBy** property in the **BeforeReport** code.

Menu Options

MENU > View > Reporting Period

Select a period for the report.

AP Shipment Designer Objects

Objects available from Shipment Designer in addition to the standard *objects* (on page 29) are:

Creditor	Fields from the Creditor record.
itLines	Properties from the Lines iterator.
Job	Fields from the Job transaction record.
Product	Fields from the product (for the Product on the line).
Purchase Order	Fields from the PO header for the purchase order referenced on a line.
ShipHead	Fields from the Shipment header record.
ShipLine	Fields from the Shipment line record.

PO Purchase Order Designer

Navigator > Setup > Purchase Orders > Purchase Order Designer

You can design your own purchase orders or open and modify an existing purchase order design. To design a purchase order quickly, start with an existing layout and modify it.

Full report design facilities including MaxBasic are available.

The PO Purchase Order Designer is based on the Report Designer and has similar functionality.

Usually a purchase order consists of:

- **Header band** showing details of the creditor and order number
- **Repeating Detail band** for lines, and
- **Footer band** for totals.

Iterator objects allow setting of the **SortBy** property in the **BeforeReport** code.

Menu Options

MENU > View > Reporting Period

Select a period to report on.

PO Purchase Order Designer Objects

Objects available in addition to the standard *objects* (on page 29) are:

Author	Fields from the Authorisation code record.
Contact	Fields from the Creditor Contact records. If a contact has been specified, this object is populated with the information associated with the document. If no contact is specified, this object is populated with the primary contact information (if specified).
Creditor	Fields from the Creditor record.
itLines	Properties for the Lines iterator.
OrderHead	Fields from the Purchase Order header record.
OrderLine	Fields from the Purchase Order line records.
Product	Fields from the Product specified in the Purchase Order line.
ProductQty	Fields from the quantity for the Product specified in the Order line.

JC Job Sheet/Quote Designer

Navigator > Setup > Job Costing > Job Sheet/Quote Designer

You can design Job Sheet and Job Quote layouts. Job Sheet and Job Quote are based on the same data files. You can design your own job sheet or quote or open and modify an existing job sheet or quote design. To design a job sheet or quote quickly, start with an existing layout and modify it.

Full report design facilities including MaxBasic are available.

The JC Job Sheet/Quote Designer is based on the Report Designer and has similar functionality.

Usually a job sheet or quote consists of:

- **Header band** showing details of the job, customer and order number.
- **Repeating Detail band** for lines, and
- **Footer band** for totals.

Iterator objects allow setting of the **SortBy** property in the **BeforeReport** code.

Two iterators are available for the Job Sheet:

- Iterator over the Job description (that can be unlimited)
- Iterator over the estimate lines for the job

Sample JCJobSheet and JCQuote documents extend Job Description text blocks across the page. The old versions of the documents are available as JCJobSheet_NoWrap and JCQuote_NoWrap respectively.

If you have a customised document design and want extended Description text blocks added, contact your Accredo QSP.

JC Job Sheet/Quote Designer Objects

Objects available in addition to standard *objects* (on page 29) are:

Contact Fields from the Customer Contact records.

- Contact specified, object is populated with the information associated with the document.
- No Contact specified, object is populated with the primary contact information (if specified).

Customer Fields from the Customer record.

Description Fields from the Job description records.

Estimate Fields from the estimate line records.

itDescription Properties for the Description iterator.

itInformation Properties for the Information iterator.

itLines Properties for the Lines iterator.

Job Fields from the Job record. DescriptionText property gives access to the Job Description.

Product Fields from the Product specified in the estimate line. The InformationText property gives access to the product's information.

ProductQty Fields from the quantity for the Product.

Label Designer

Navigator > Setup > [Module] > Label Designer

Labels have a single pre-defined band. Label stationery comes in a variety of sizes with different labels on the page. You can design a single label and specify the page layout; the label design is replicated across all labels. When printing, a preview of the label will open. Full report design facilities including MaxBasic are available. Label Designer is included with each Accredo module, along with a sample definition file.

Objects

A single primary object based on the Module is available with the standard *objects* (on page 29). Other objects related to the primary object (for example, Contact, Delivery Address, and Customer for Invoice Labels) are also available. The objects represents the:

Address	The address objects uses the **Address** selection on report Label Selections, to locate address fields.
Customer	Fields from the Customer (Customer Labels).
Product	Fields from the Product (Product Labels).
Creditor	Fields from the Creditor (Creditor Labels).
Invoice	Fields from the Invoice (Invoice Labels).
Order	Fields from the Sales Order (OE Labels) or fields from the Purchase Order (Purchase Order Labels).
Asset	Fields from the Asset (Asset Labels).

Functions

In *Code Editor* (on page 14), the Report Functions in addition to MaxBasic and *Report Designer functions* (on page 30) are:

CopyNumber	Returns the current copy number (1 for first copy, 2 for second copy, and so on). It can be used to print different information on different copies.
LabelCopies	Returns the number of copies requested, typically used to print information such as "Box 1 of 5" on the label.

Label Layout

Page layout is set by the **LabelLayout** *report property* (on page 33) Click **(Label)** beside **LabelLayout** in Property Editor, then click **Open Narrative Editor** `(F2)`. Choose a **Predefined label** from a list, or select **Custom label** and specify the details.

Page Orientation	Portrait or Landscape.
Select Paper	Choose a paper size.
Page Width & Page Height	The physical paper size (mm).
Columns & Rows	The number of labels across and down the page.
Left Margin & Top Margin	Margins between the paper edge and the first label (mm).
Label Width & Label Height	The size (mm) of a label.
Horizontal Pitch & Vertical Pitch	The horizontal and vertical distance between the start of one label and the start of the next (mm).

Shape	The shape of the label can be Rectangle, Round Rectangle (rectangle with rounded corners) or an Ellipse.
Ellipse Width & Ellipse Height	Only applies to the Round Rectangle shape and determines the curvature of the rounded corners.