

# SYSPRO Power Tailoring

A step-by-step guide



This book is the first of two written on the topic of tailoring SYSPRO. It will help you understand the various ways in which you can customize your ERP solution without using development skills.





# SYSPRO Power Tailoring

**A Step-by-Step Guide**

By Paul Hollick

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## About the Author

**Paul Hollick** has worked at SYSPRO for 27 years. Since joining the company he has been involved in everything from customer support, reseller support, through consulting to customers on manufacturing issues, to running the Professional Services division that looked after SYSPRO e.net Solutions.

Since its inception with the release of SYSPRO 6.0, Paul has been heavily involved in SYSPRO's Power Tailoring, and many of the customization and Power Tailoring tutorials that can be found the SYSPRO SupportZone have been written by him.

Paul is also active on the SYSPRO Forum website, where he is both an administrator, and moderates six forums. He states that these are a great place for the SYSPRO community to find out more information, and post queries. Many enhancements that now appear in SYSPRO originated from queries and requests posted there.

Recently he took up a new post at SYSPRO; that of running a new support website that will make it easier to find pertinent information that suits your current and future needs.



# Foreword

“SYSPRO’s philosophy has always been to develop a software product that is capable of being tailored to suit customer requirements, and in such a way that this is achievable in the hands of the end user.”

Phil Duff, Founder and CEO, SYSPRO

SYSPRO is a highly configurable application, allowing you to change the way the product works merely by switching set-up options on or off as required. There are times, however, when the product needs to be changed or customized to suit specific business requirements and SYSPRO allows you to modify the behavior of any SYSPRO application and to add business functionality.

Power Tailoring or customizing SYSPRO can be as simple as rearranging fields on a form – or you can build a complete application to automate a business process. You have the flexibility and capability to decide on the level of complexity and sophistication needed to solve each particular business challenge.

This book is the first of two written on the topic of Power Tailoring SYSPRO. It will help you understand the various ways in which you can customize your ERP solution without using development skills. The second book is more advanced and has been written for users with development skills.

This foreword explains the structure of the book so that you can read it from beginning to end or use it as a reference guide.

*SYSPRO Power Tailoring A step-by step guide* is divided into nine key sections or chapters, with each section focusing on a different aspect of tailoring SYSPRO.

Chapter One summarizes all the aspects of the User Interface and provides a description of the various terms and tools that are referred to throughout the rest of the book. Chapter One has been divided into four sections: Main Windows Components; Menus and Navigation; Movers and Fixers; and Form Components.

Chapters Two, Three and Four address each one of the sections in Chapter One in detail. Chapter Two explains the layout of SYSPRO by addressing the available menus and how to navigate within SYSPRO; Chapter Three explains how to move data around as well as how to edit (reduce, reset, remove, hide etc.) or „fix“ this data; and Chapter Four covers Forms which are the main building blocks of the SYSPRO user interface and are used to display and capture data.

Chapters Five through to Nine address specific additional functionality that can be used to tailor SYSPRO:

- Chapter Five teaches you how to display significant amounts of data with the use of *Listviews*, and how to display the data by using *Data grids*.
- The vast majority of SYSPRO programs have menu bars and/or toolbars, and Chapter Six discusses the use of these in detail.
- Chapter Seven explores the use of *Customized Panes* as well as *Associated Panes*. Customized Panes are typically used to display data, but can also be used to create/update data. Creating a customized pane from scratch ordinarily requires development skills, and so would fall outside the scope of this book; however, you can use customized panes even if you are not a developer. Several of these customized pane types are available with pre-developed templates that require no development skills and this chapter covers the creation of these.
- Chapter Eight caters for the fact that SYSPRO is sold and distributed across the globe. In addition to providing a simple system to allow SYSPRO to be translated into different languages, a facility exists to customize the user interface to use industry or customer-specific jargon or terminology. This chapter also covers the formatting of dates and numeric values for regional or local requirements.
- The final chapter of the book, Chapter Nine, focuses on the key productivity tools within SYSPRO that relate to customization – *Events*, *Triggers*, and *Electronic Signatures*.



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# Introduction

Known as Power Tailoring, SYSPRO contains many ways for you to personalize and customize the software to meet your needs and those of your organization. Power tailoring is version-independent, so any changes that you make now will not prevent you from upgrading to a newer version later and when you do upgrade, these changes will continue to work as before.

Power tailoring is a vast topic ranging from operators personalizing their view of SYSPRO (by selecting from a pre-defined list of skins) to administrators embedding externally developed Microsoft .NET User Controls and using them to interact with SYSPRO.

The subject of power tailoring can be split into two main areas: those items that require development skills, and those that don't. This book covers the power tailoring that you can perform without requiring development skills. A separate book covers power tailoring that can be performed if you have development skills.

*SYSPRO Power Tailoring : A Step-by-Step Guide* – Targeted at system administrators and "seekers of value", it requires no development knowledge or skills. It enables SYSPRO users to get the most out of the user interface, and is a good reference of what is possible for those planning a SYSPRO implementation.

*SYSPRO Power Tailoring : A Developer's Guide* – Targeted at system administrators and "seekers of value" who have a smattering of development skills, as well as being a SYSPRO primer for existing developers. It covers the use of the embedded VBScript engine, interacting with e.net Solutions business objects, through to embedding .NET User Controls and using them to pass data to/from SYSPRO.



# Chapter 1 - Defining the User Interface

Before jumping straight in and explaining what customization is available, let's take a moment to clarify the terms that will be used in this book.

## Main Window Components

### Window

When referring to a window in SYSPRO, we are referring to the whole screen for that program. For example, the *Sales Order Entry* window contains a number of forms and listviews, but the screen that embraces these is referred to as the *window*. **Figure 1-1** shows the *Sales Order Entry* window.

### Pane

A pane is a one of the components of a window, and can be a form, a listview, a data grid, customized pane etc. In **Figure 1-1**, *Order Header*, *Customer Information*, *Order Totals*, *Entered Order Lines*, *Order Line Details*, *Stocked Line*, *Stocked Line Information* and *Stock Code Information* are all panes.

### Forms

Forms are panes that are used to display and capture data. They comprise two columns - one containing the caption, and one containing the value. There are two types of forms - a display form and an entry form.

#### Display Forms

Display forms, as the name suggests, are used to display information; you cannot add or maintain data within them. In **Figure 1-1**, *Customer Information*, *Order Totals*, *Order Line Details* and *Stock Code Information* are all display forms.

#### Entry Forms

Entry forms allow the display, entry and maintenance of data. Although entry forms allow the entry and maintenance of data, some fields cannot be changed. The captions for these will be greyed out.

In **Figure 1-1**, *Order Header*, *Stocked Line* and *Stocked Line Information* are all entry forms. In the *Order Header* form, the *Sales order* field is greyed out and cannot be changed.

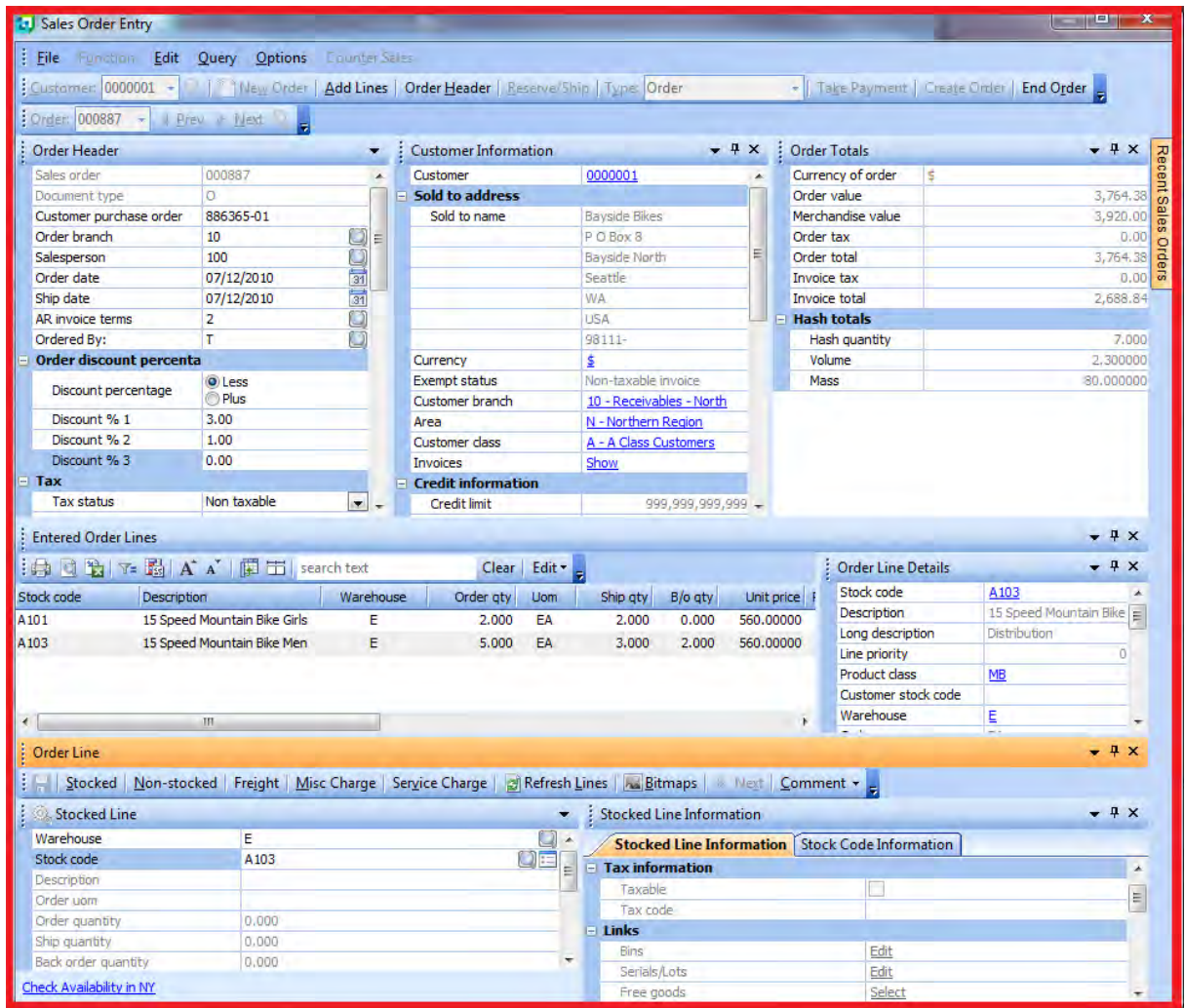


Figure 1-1: The Sales Order Entry window.

### Listview

A listview consists of cells in rows and columns, and is used for displaying data only. It appears similar to a spreadsheet. Figure 1-2 shows the Movements listview from the Inventory Query.

Date	Type	Warehouse	Period	Ref/invoice	Trn type	Quantity	Transaction value	Customer	Supplier	Unit cost	Unit price/new cost
15/03/2008	Inv	E	2009/01	000000038	Rec	500.000	175,000.00		0000001	350.00000	350.00000
18/03/2008	Sale	E	2009/01	100289	Inv	50.000	17,500.00	0000006		350.00000	560.00000
20/03/2008	Sale	E	2009/01	100292	Inv	200.000	70,000.00	0000004		350.00000	560.00000
19/04/2008	Sale	E	2009/02	100295	Inv	50.000	17,500.00	0000006		350.00000	560.00000
26/04/2008	Sale	E	2009/02	100297	Inv	200.000	70,000.00	0000004		350.00000	560.00000
26/04/2008	Sale	E	2009/02	100302	Inv	200.000	70,000.00	0000004		350.00000	560.00000
29/04/2008	Inv	E	2009/02	000000046	Rec	500.000	175,000.00		0000001	350.00000	350.00000
17/05/2008	Inv	E	2009/03	000000051	Rec	500.000	175,000.00		0000001	350.00000	350.00000
29/05/2008	Sale	E	2009/03	100311	Inv	50.000	17,500.00	0000004		350.00000	560.00000
30/05/2008	Sale	E	2009/03	900035	Deb	0.000	0.00	0000001		350.00000	0.00000
14/06/2008	Inv	E	2009/04	000000059	Rec	500.000	175,000.00		0000001	350.00000	350.00000
25/06/2008	Sale	E	2009/04	800053	Cre	-100.000	-35,000.00	0000004		350.00000	560.00000
08/07/2008	Sale	E	2009/05	100319	Inv	50.000	17,500.00	0000006		350.00000	560.00000

**Figure 1-2:** The *Movements* listview in the *Inventory Query*

### Data Grid

A Data grid is similar to a listview in that it has cells arranged in rows and columns. It differs from a listview in that you can use it to add/maintain data. **Figure 1-3** shows the *Journal Details* data grid from the *General Ledger Journal Entries* program.

### Customized Pane

A customized pane is a user-defined pane which can be configured as one of several types. These are *Graph*, *Listview*, *Web browser*, *SRS/Crystal report*, *PDF viewer*, *Rich text notepad*, *.NET user control*, *Form*, *Executive dashboard* or *Search window*. Depending on the type selected, you can use a combination of settings, VBScript and business objects to display/add/maintain the required data.

Ledger code	Description	Transaction date	Reference	Debit amount	Credit amount	Comment
00-1020	Global Bank	01/10/2010	MyRef1		20.00	MyComment
00-1030	National Bank	06/05/2010	NoRef1		30.00	NoComment
00-1040	City Bank	03/10/2010	Ref2		50.00	Comment 3
00-1060	Credit Card Account	30/09/2010	Ref3		100.00	Comment 4
00-1080	Petty Cash	31/12/2010	From PC		200.00	From Petty Cash

Rows: 5      Total: 200.00      Total: 200.00

**Figure 1-3:** The *Journal Details* data grid in the *General Ledger Journal Entries* program.

## Custom Forms

A custom form provides a mechanism to add extra data fields which are linked to certain master and transaction tables.

The screenshot shows the SYSPRO interface for stock code A101. The 'Stock Code Details' pane is on the left, and a 'Custom Form' pane is on the right. The 'Custom Form' pane is titled 'Form Details' and contains the following fields:

Form Details	
Size	Medium
Style	BMX
Loading Factor	30.00
Look ahead window	5
Expected supersession date	02/05/2012

The 'Stock Code Details' pane shows the following information for stock code A101:

Stock code	A101
Description	15 Speed Mountain Bike Gir
Long description	Distribution/Foreign Price E
Dangerous goods	
Stock code on hold flag	
Date of supersession	
<b>Units of measure</b>	
Stocking unit of measure	EA
Alternate unit of measur	EA
Other unit of measure	EA
Manufacturing unit of me	EA
Cost unit of measure	EA
Quantities in stock & alt	No
Mass per stocking unit	10.000000
Volume per stocking unit	0.300000

**Figure 1-4:** A custom form added to the inventory master table

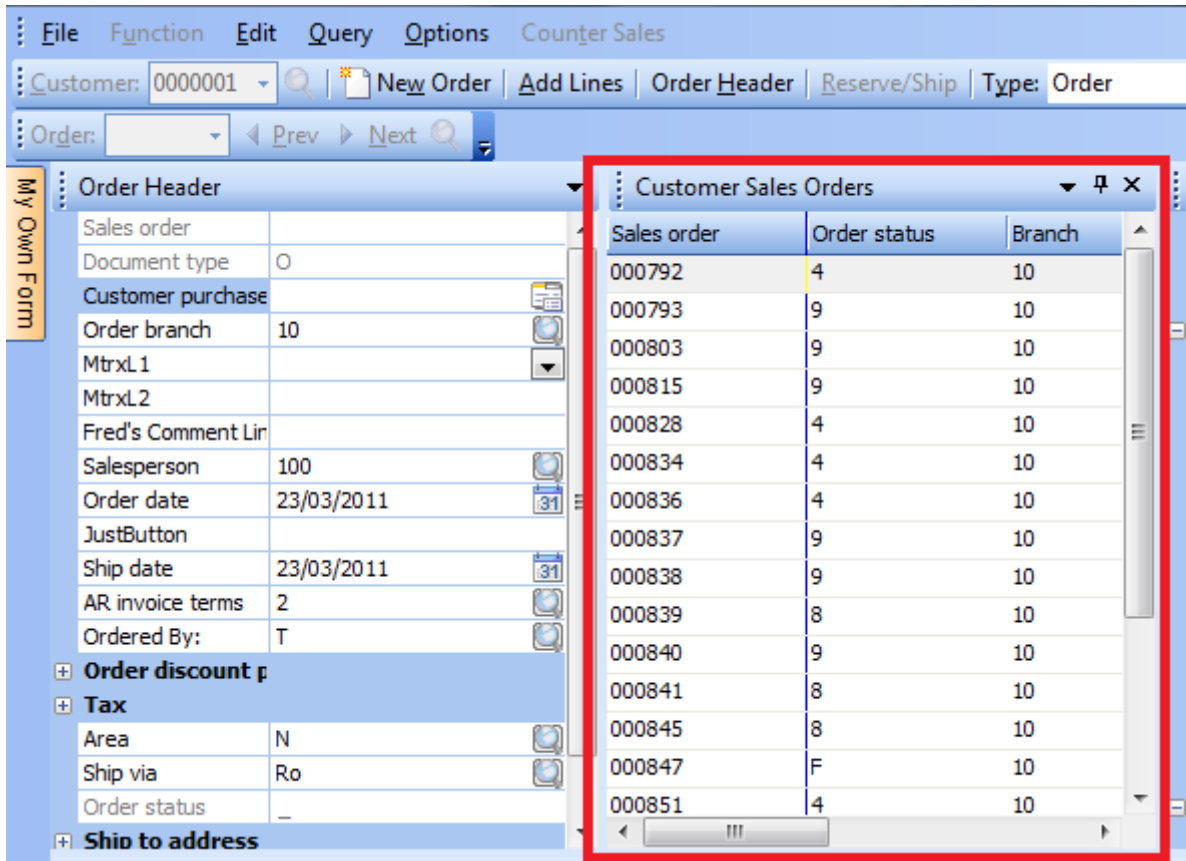
A custom form is one that can be included in the relevant take-on or transaction program, to which the fields are added. These can be alphanumeric, numeric or date fields, and validation options can be set against them. Once created as custom form fields, these fields can be embedded in display and entry forms. **Figure 1-4** shows a custom form added to the inventory master table.

## Associated Pane

An associated pane is a pre-written customized pane that is specifically associated with a SYSPRO key field (i.e. a customized pane template that has been written for a specific SYSPRO key field such as stock code, customer, requisition, etc.). The associated pane can be a listview, a form, a graph, or any other format that is supported for a customized pane.

An associated pane differs from a customized pane in that when the value of the field with which it is associated changes, the associated pane automatically changes to match.

**Figure 1-5** shows a listview associated pane that has been added to *Sales Order Entry*. It is associated with the *Customer* field and will reflect all sales orders for the current customer account code. If the customer code changes, the contents of the associated pane changes accordingly.



**Figure 1-5:** A listview associated pane that has been added to *Sales Order Entry*

### Search Window

A search window is a special type of customized pane that contains two panes. One pane is used for the selection criteria and the other is used to display the results of the search. The search windows most likely required have been supplied and can be configured to be used instead of a standard browse. You can also create your own customized pane search windows.

**Figure 1-6** shows the supplied pre-defined *Stock Code Search*. You can save the *Search statements* for later use.

The screenshot shows the 'Stock Code Search' window. At the top, there is a 'Start Search' button. Below it is the 'Search Criteria' section, which includes a search bar with a magnifying glass icon and the text 'Stock Code Search'. Underneath, there are sections for 'Previous searches', 'Search criteria', and 'Search statement'. The 'Search criteria' section shows a table with the following details:

Column	ProductClass
Operator	equal to
Variable value	BA
Modifier	And
<input type="button" value="Add Expression"/>	

The 'Search statement' section shows the following SQL-like query:

```
Description LIKE "*"cycle*" And ProductClass = "BA"
```

Below the search criteria is the 'Search Results' section, which displays a table of search results:

Stock code	Description	LongDesc	Product class	Supplier	On Hold
A200	Bicycle Pump	Distrib./Alt. Unit Meas/Alt Su	BA	0000004	
A201	Bicycle Chain and Lock	Distrib./Alternate Supplier	BA	0000004	
A202	Bicycle Speed/Odometer	Distrib./Service Charge/Alt Su	BA	0000004	
A203	Bicycle Water Bottle/Bracket	Dist /Unit Quantity Processing	BA	0000001	
FOR500	Bicycle Chain - 8 Speed	Unimodal seasonal	BA	0000013	
FOR510	Bicycle Chain - 9 Speed	Unimodal seasonal	BA		
LCT200	Imported Bicycle Child Seat	LCT Serialized - Manual	BA	0000004	
LCT201	Imported Bicycle Chain & Lock	Landed Cost Tracking (LCT)	BA	0000004	
LCT202	Imported Bicycle Speedometer	Landed Cost Tracking (LCT)	BA	0000004	
SER200	Bicycle Child Seat	Serialized - Manual	BA	0000004	

At the bottom of the window, it indicates '10 rows'.

Figure 1-6: The supplied pre-defined *Stock Code Search*



## Menus and Navigation

### Menus

The standard SYSPRO menu consists of the *Navigation Pane*, *Main Menu*, *Executive View* and *Program Details* panes. The *Main Menu* pane consists of a menu folder for each SYSPRO module and areas such as *Analytics*, *Reporting Services* and *Workflow*. Each menu folder can contain sub-folders and menu items. The *Program Details* pane shows the first level menu folders and menu items that would appear below the highlighted entry under the main menu.

### Navigation Pane

The *Navigation Pane* consists of two standard menu items, and a user-defined menu system. The first standard menu is a list of the programs that you have run most recently, and if you click on one of them it will run it for you. The second standard menu is a calendar. The user-defined menu system allows you to create one or more menus, and each can have menu groups and menu items. **Figure 1-7** shows the *Navigation Pane* containing multiple user-defined menus.

### Executive View

The executive view is a placeholder for customized panes that you want run before calling up any SYSPRO programs. Customized panes allow the creation of different object types (Graph, Listview, Web Browser, SRS/Crystal Report, PDF Viewer, Rich Text Notepad, .NET User Control, Form, Search Windows, Executive Dashboard), and most of these have pre-defined examples that require no coding, and work by double-clicking on them.

After adding several customized panes to the executive view, you can move them around within the executive view to suit your requirements, using docking stickers.

### Toolbars

All SYSPRO programs have at least one toolbar. Standard toolbars contain buttons to perform the more common tasks of the programs. These buttons are enabled/disabled by the program depending on which field/form focus is currently set. You can add new buttons to existing toolbars, modify what existing buttons do, add new toolbars, and remove toolbars (if more than one is present). It is also possible to drag a toolbar from its current location and leave it free floating.

**Figure 1-8** shows the two toolbars that are present as standard in the *Purchase Order Entry* program. As this purchase order is in the process of being maintained, some of the buttons are greyed out as the function is not available at this point of the process.

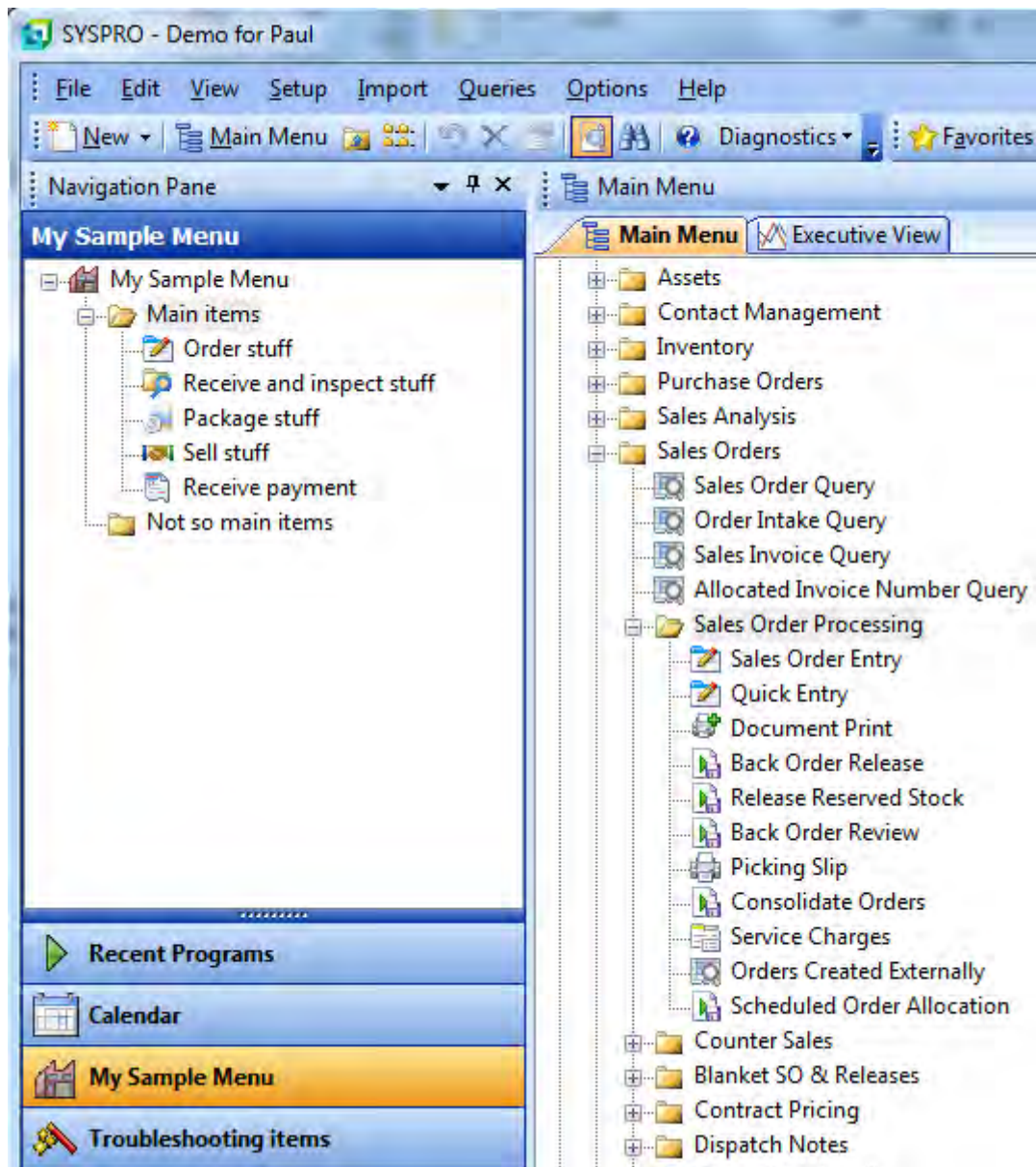
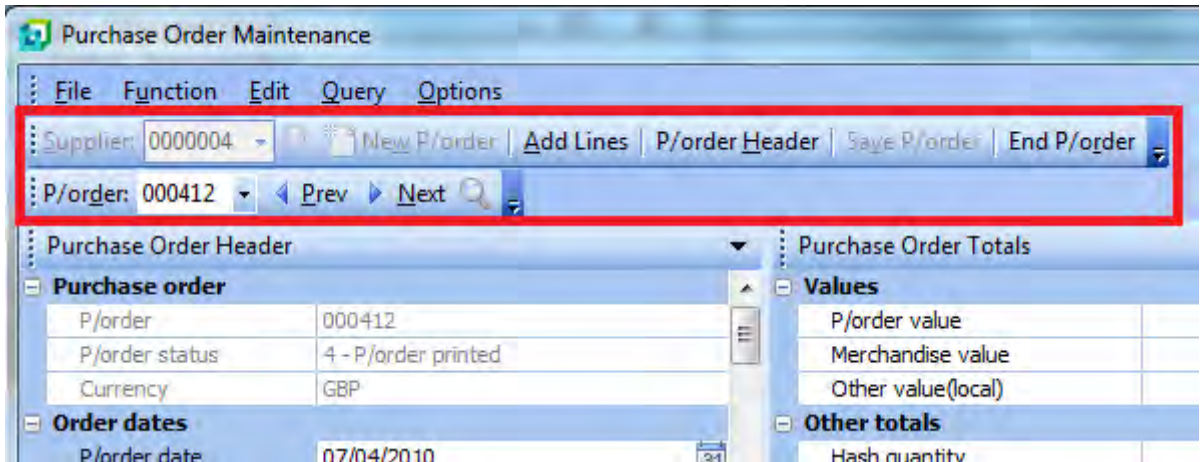


Figure 1-7: The Navigation Pane containing multiple user-defined menus

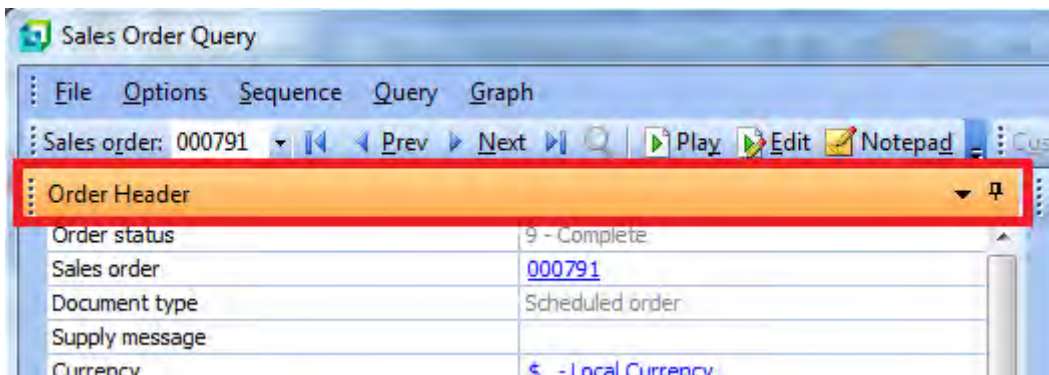


**Figure 1-8:** Two toolbars that are present in the *Purchase Order Entry* program

## Movers and Fixers

### Titlebar

Each pane (form, listview, data grid, etc.) has a section at the top called a titlebar that contains its name. Within any SYSPRO program this title is unique. The title is used to identify which form you are customizing/removing/reinstating. **Figure 1-9** shows the titlebar for the *Order Header* form within the *Sales Order Query* program.

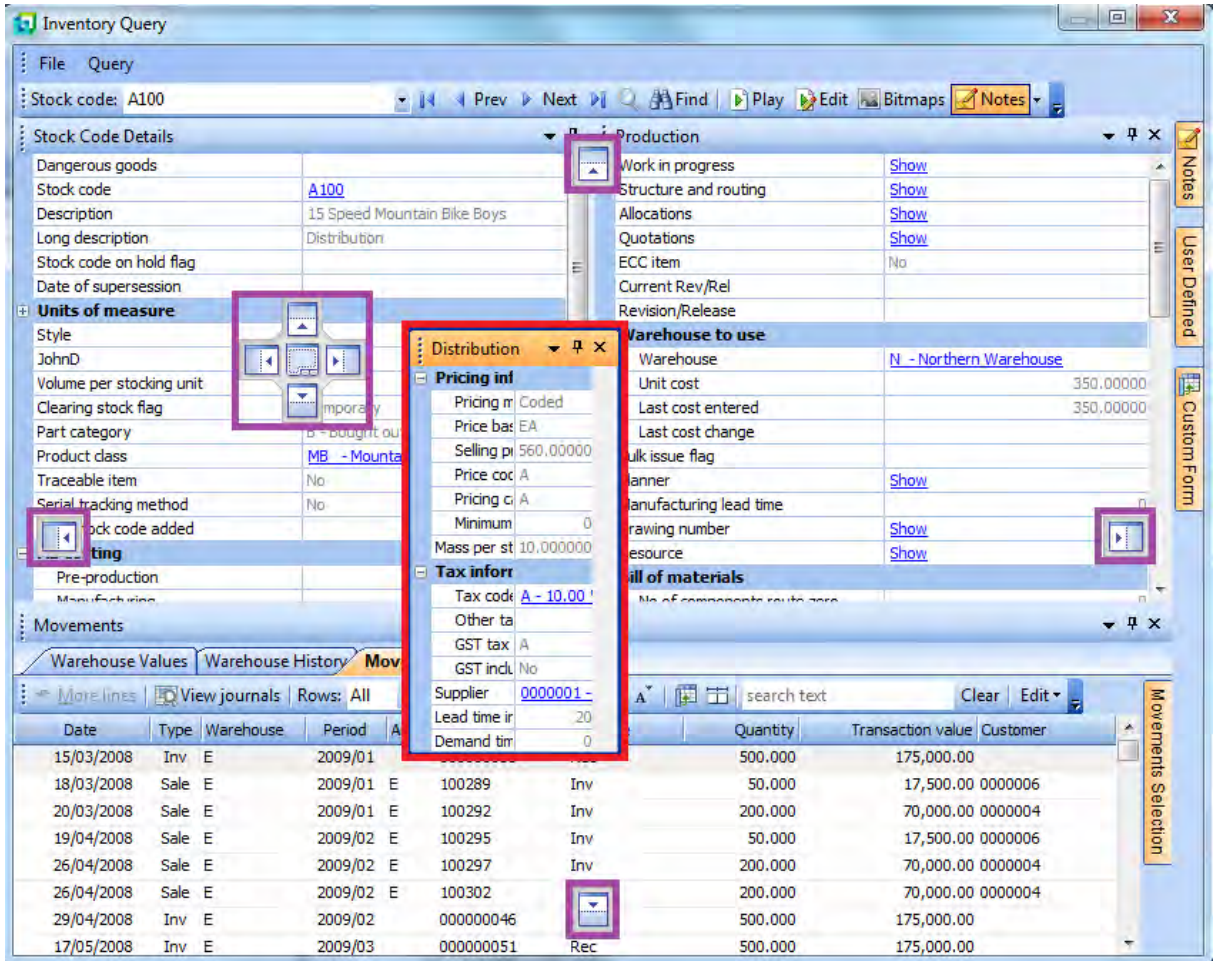


**Figure 1-9:** The titlebar for the *Order Header* form within the *Sales Order Entry* program

### Docking Panes

Docking panes are panes that can be moved to different positions on the screen. Most forms, listviews, data grids, customized panes, etc., can perform this task. It is done by clicking on the titlebar

and dragging it to a new location. These forms can be repositioned within the program, configured to float on their own, or contracted to a tab so that more application workspace is available for other forms. Forms that have been contracted down to tabs will expand when the mouse pointer is positioned on them. **Figure 1-10** shows the *Distribution* form has been dragged from its normal location and can either be located in another position, or left floating where it is.



**Figure 1-10:** The *Distribution* form being dragged from its normal location and the docking stickers

## Docking Stickers

Docking stickers appear when a docking pane is being moved over a SYSPRO window. There are five docking stickers and they assist you in docking the pane in the correct location. The exact location of the docking stickers depends on the layout of the program. If you have a query that contains a row of

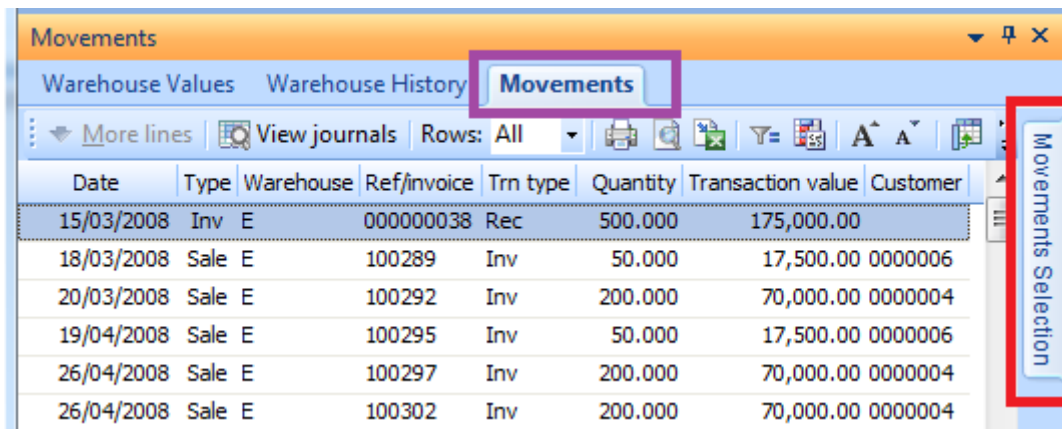
panes at the top of the screen, and one or more panes below this (such as the *Inventory Query* in **Figure 1-10**), the location of the docking stickers, as well as their function, will change as you move the floating pane over other panes on the screen.

When a pane's titlebar is dragged over a docking sticker, the area where the pane would be docked (if you released it) is highlighted in blue. You can continue moving the docking pane around the other docking stickers to see where they would dock the pane if it were released. You can double-click on the titlebar of a floating pane to return it to the previous position. **Figure 1-10** shows the five docking stickers around the pane being dragged. The location of these will change as the *Distribution* form is dragged over the *Production* form, or the listview below it.

## Tabs

There are two types of tabs, but they are both a means of saving screen real estate by reducing the displayed part of the pane to the size of the tab. The first type is where several panes have been stacked upon one another, so that they only use up the same amount of space as one pane. Each pane has its own tab displayed alongside the others. In this case, whichever tab is on top/highlighted will have its pane displayed. This can be seen in **Figure 1-11** where the *Movements* tab is on top, so its pane/data is displayed.

The second type of tab is where a pane has had its *Auto Hide* option deselected, and it is reduced to a tab around the outside of the window. The *Movements Selection* tab can be seen in **Figure 1-11**, and the *Auto Hide* option can be seen in **Figure 1-12** highlighted by the mouse pointer.



**Figure 1-11:** The two types of tab

## Auto Hide

The auto hide option allows you to pin a pane in its current location, or to unpin it and it will appear as a tab around the outside of the main program window. The auto hide option can be seen in **Figure 1-12**.

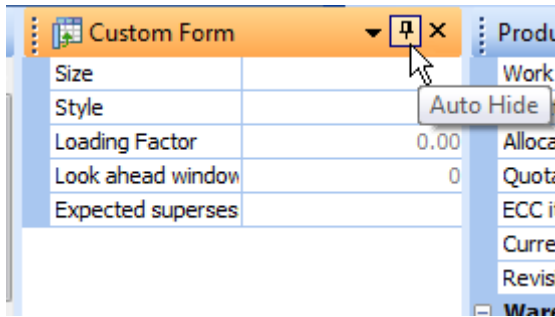


Figure 1-12: The *Auto Hide* option

## Form Components

### Field

Fields appear on display forms and entry forms. A field comprises a caption and its matching value, if a value currently exists. In **Figure 1-13**, the label of *Warehouse* and its matching value of *E* make up the *Warehouse* field.

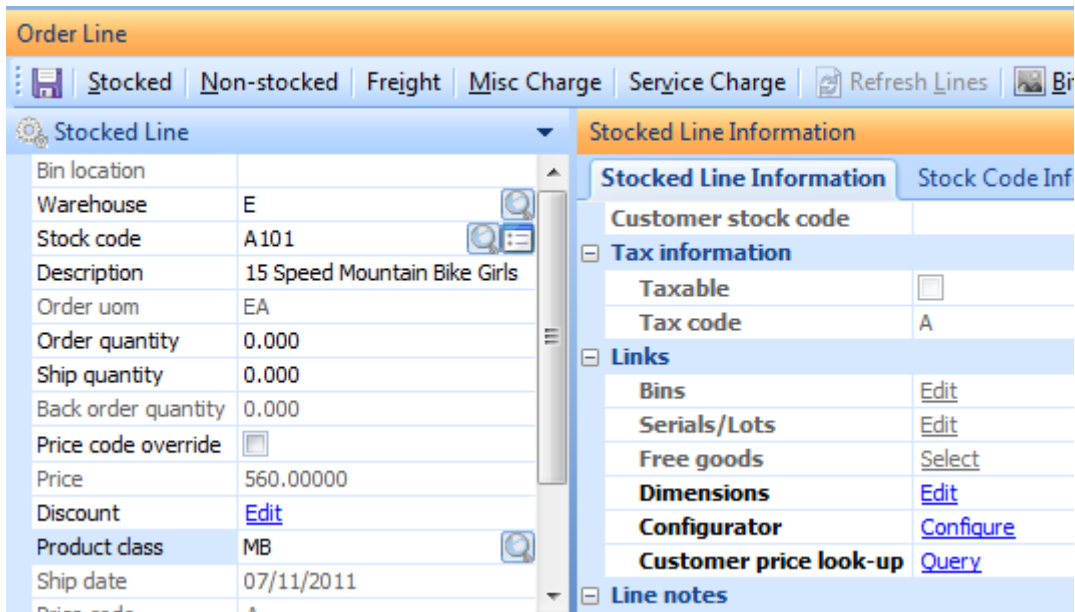


Figure 1-13: The components of a form showing *Fields*, *Captions*, *Values*, *Groups*, and *Display-Only Fields*.

### Caption

A caption is the label assigned to an item of data, or value. A caption, together with its value, forms part of a field. In **Figure 1-13**, *Warehouse* and *Stock code* are both captions.

### Value

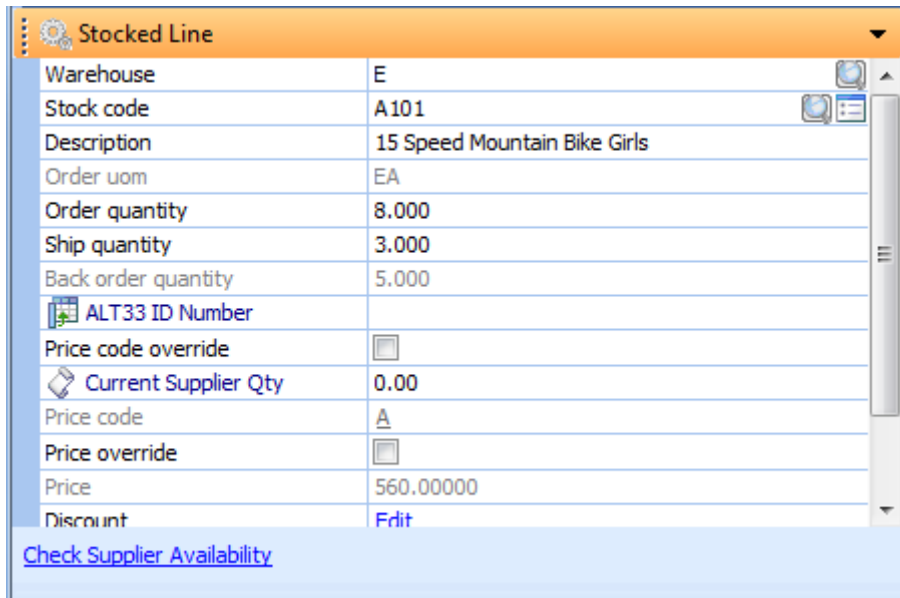
A value appears against a caption, making up the field. It is either blank, or contains data being displayed/data that has been input.

### Display-Only Fields

On an entry form, some fields can be used to enter or modify data. Others appear greyed-out as they are only present to enhance the information displayed, or because the option is not relevant in the current contents. In **Figure 1-13** the *Order uom* field is greyed out as it cannot be changed, and the *Bin location* field is greyed-out because it is not relevant (the inventory control option for multiple bins is not enabled).

### Groups

Fields on a form can be grouped together, and these groups can be expanded to show all the fields, or contracted so that only the group heading appears. In **Figure 1-13**, *Tax information*, *Links* and *Line notes* are all groups.



The screenshot shows a 'Stocked Line' form with the following fields and values:

Stocked Line	
Warehouse	E
Stock code	A101
Description	15 Speed Mountain Bike Girls
Order uom	EA
Order quantity	8.000
Ship quantity	3.000
Back order quantity	5.000
ALT33 ID Number	
Price code override	<input type="checkbox"/>
Current Supplier Qty	0.00
Price code	A
Price override	<input type="checkbox"/>
Price	560.00000
Discount	Fdit

At the bottom of the form, there is a link: [Check Supplier Availability](#)

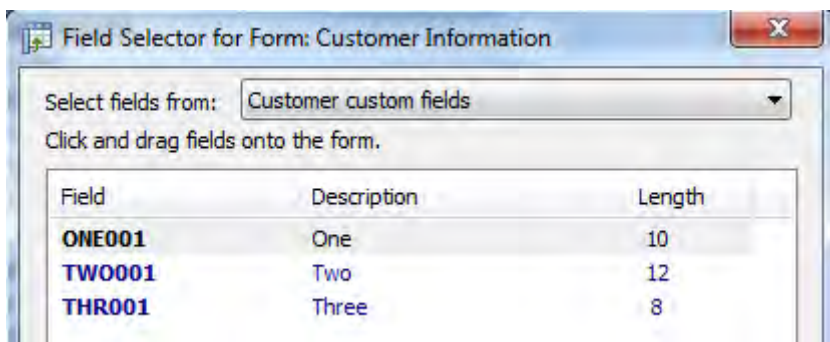
**Figure 1-14:** The *Check Supplier Availability* form action

## Form Action

A form action is a hyperlinked option that is added to the bottom of a form. It can be configured to call another SYSPRO program or to call VBScript code (which could call a third party application). **Figure 1-14** shows the form action *Check Supplier Availability*.

## Field Selector

The field selector screen allows you to see the fields that are available to be dragged onto a form. The dropdown at the top allows you to select from the available types of fields (custom form fields associated with this form, fields from the master file associated with this form, or scripted fields that you have created). Not all field types are available for every form. Fields can be dragged from the field selector onto a form, and then the field name appears on the field selector in italics. **Figure 1-15** shows the field selector displaying the available custom form fields for a form associated with the customer master file.



**Figure 1-15:** The *Field Selector* showing the *Customer custom fields*

## Custom Form Fields

A custom form provides a mechanism of adding additional fields to certain master tables and transactions through the master file take-on and transaction programs. The format of these fields can be defined as alphanumeric, numeric or date. Defaults can be set and fields can be set as mandatory. The individual fields can also be dragged onto forms that are related to this master table.

## Scripted Fields

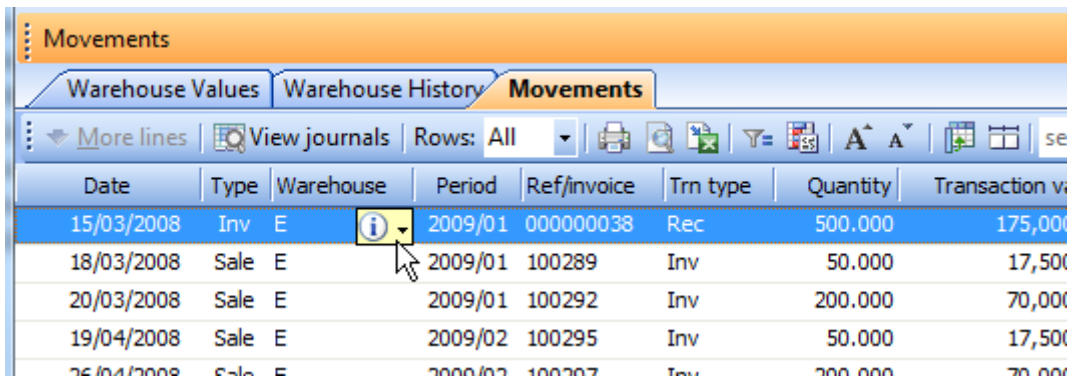
A scripted field is a container that can be placed on a form (both display and entry), and is available to be modified using VBScript. During its creation you specify the type of field (e.g. alphanumeric, numeric or a date) as well as its size. Scripted fields are global. Once they have been created they are available for use on all forms, although their contents are only available within the current program.

## Smart Link

A smart Link is a customizable mini-menu that allows you to launch pre-defined context-sensitive functionality, SYSPRO programs, or custom programs that you have added. Smart links become available when your mouse pointer hovers over a column that has been configured to be smart



link-aware. **Figure 1-16** shows the mouse pointer being moved over the *Warehouse* field and the smart link indicator being displayed.

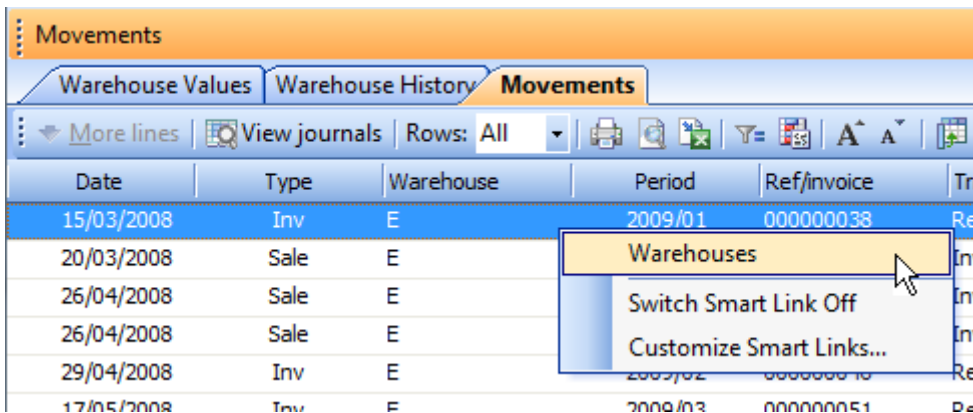


The screenshot shows the 'Movements' window with tabs for 'Warehouse Values', 'Warehouse History', and 'Movements'. The 'Movements' tab is active. Below the tabs is a toolbar with options like 'More lines', 'View journals', and 'Rows: All'. A table displays movement records with columns: Date, Type, Warehouse, Period, Ref/invoice, Trn type, Quantity, and Transaction v. A mouse cursor is hovering over an information icon (i) in the Warehouse column of the first row (15/03/2008, Inv, E, 2009/01, 000000038, Rec, 500.000, 175,000).

Date	Type	Warehouse	Period	Ref/invoice	Trn type	Quantity	Transaction v
15/03/2008	Inv	E	2009/01	000000038	Rec	500.000	175,000
18/03/2008	Sale	E	2009/01	100289	Inv	50.000	17,500
20/03/2008	Sale	E	2009/01	100292	Inv	200.000	70,000
19/04/2008	Sale	E	2009/02	100295	Inv	50.000	17,500
26/04/2008	Sale	E	2009/02	100297	Inv	200.000	70,000

**Figure 1-16:** The *Smart Link* indicator

At this point a small smart link information icon appears. If you click on the icon, a menu is displayed. **Figure 1-17** shows the context-sensitive smart link menu being displayed.



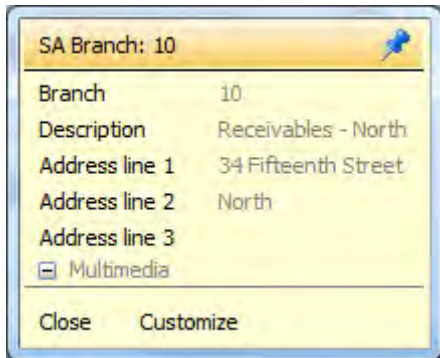
The screenshot shows the same 'Movements' window as Figure 1-16. A context-sensitive menu is open over the 'Warehouse' field of the first row. The menu items are: 'Warehouses', 'Switch Smart Link Off', and 'Customize Smart Links...'. A mouse cursor is pointing at the 'Warehouses' option.

Date	Type	Warehouse	Period	Ref/invoice	Trn
15/03/2008	Inv	E	2009/01	000000038	Rec
20/03/2008	Sale	E			Inv
26/04/2008	Sale	E			Inv
29/04/2008	Inv	E	2009/02	000000010	Rec
17/05/2008	Inv	E	2009/03	000000051	Per

**Figure 1-17:** The *Smart Link* menu

### Quick View

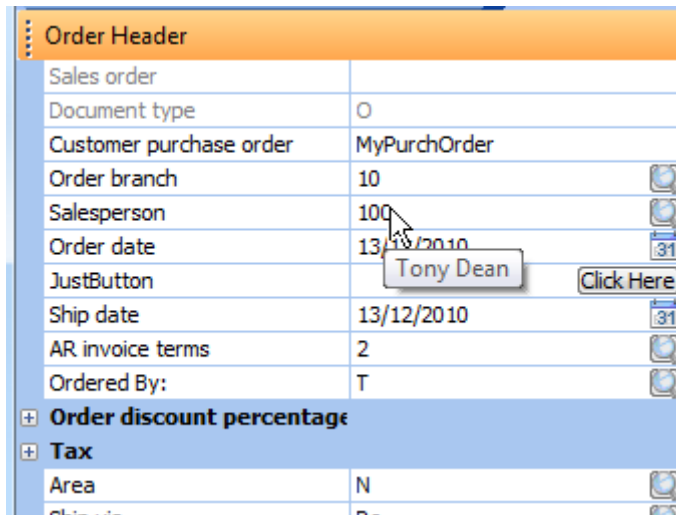
A quick view is a customizable display of context-sensitive information and is activated using either a smart link, or a hyperlinked key field on a form. The contents of the quick view screen can be customized using the *Quick View Definition* program that is available from the *Customize* option at the bottom of the quick view window. **Figure 1-18** shows a quick view for the *Customer Branch* field.



**Figure 1-18:** The *Quick View* for *Customer Branch*

### Tooltip

Tooltips are typically hidden, but are displayed automatically when the mouse pointer hovers over a field that has an associated tooltip. The content of the tooltip is displayed to enhance the information contained in a field, or help explain the use of a control. **Figure 1-19** the salesperson's name being displayed when the mouse pointer hovers over the *Salesperson* code.



**Figure 1-19:** The *Tooltip* for *Salesperson* showing the salesperson's name

### Column Heading

A listview is similar to a spreadsheet in that it has rows and columns. Columns can be removed by dragging the heading of the column from the listview. A column heading can also be used to launch a context-sensitive menu. **Figure 1-20** shows the column headings (*Date*, *Type*, *Warehouse*, *Type*, etc.).

## Cells

A listview is made up of many cells. Two of these cells have been highlighted in **Figure 1-20**.

The screenshot shows the SYSPRO Movements listview. The 'Field Chooser' dialog box is open, listing various fields that can be added to the listview. Two cells in the listview are highlighted with blue boxes: the 'Quantity' cell '20.000' and the 'Customer' cell '0000001'.

Date	Type	Warehouse	Period	Area	Ref/invoice	Trn type	Quantity	Transa...	Customer
25/06/2008	Sale	E	2009/04	E	800053	Cre	-100.000	-35,000.00	0000004
08/04/2010	Inv	N	2011/02		N 0000001	Tra	-100.000	-35,000.00	
30/03/2010		N			900035	Deb	0.000	0.00	0000001
08/03/2010		N			100514	Iss	1.000	350.00	
09/03/2010		N			100514	Inv	5.000	1,750.00	0000001
05/03/2010		E			100480	Inv	10.000	3,500.00	0000006
13/03/2010		N			100369	Inv	10.000	3,500.00	0000001
09/03/2010		S			100471	Inv	10.000	3,500.00	0000007
05/03/2010		S			100481	Inv	10.000	3,500.00	0000007
26/01/2010		N			100325	Inv	20.000	7,000.00	0000001
09/03/2010		S			100473	Inv	20.000	7,000.00	0000011
12/03/2010		N			100375	Inv	25.000	8,750.00	0000010
29/03/2010		S			100310	Inv	25.000	8,750.00	0000003
24/03/2010		S			100371	Inv	25.000	8,750.00	0000007
13/03/2010		S			100379	Inv	25.000	8,750.00	0000003
20/03/2010		S			100383	Inv	25.000	8,750.00	0000011
16/01/2010	Sale	S	2010/11	S	100463	Inv	25.000	8,750.00	0000003
26/01/2010	Inv	S	2010/11		000000192	Rec	25.000	8,750.00	

**Figure 1-20:** A listview with two cells and the *Field Chooser* highlighted

## Field Chooser

A listview can be designed to only display some of the available columns. It is also possible for an operator to remove columns they do not want displayed, by dragging the column heading from the listview. If the removed columns need to be put back, or columns need to be displayed that do not show by default, the field chooser can be invoked. The field chooser shows a list of all the column headings that are not currently displayed in the listview. These fields can be dragged onto the column heading, and the column will be added to the listview. The next time that data is to be displayed, the added column will be populated. **Figure 1-20** shows the field chooser highlighted (the biggest of the three highlighted items).



## Chapter 2 - Menus and Navigation

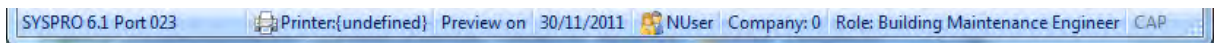
### Initial SYSPRO Menu System

The first time an operator logs in to SYSPRO they get the default layout. The *Ribbon Bar* appears at the top of the window, the *Navigation Pane* to the left, the *Browser* to the right (pointing to the SYSPRO help). In the middle is the *Main Menu/Executive View* pane (set to display the *Executive View*) and the *Program Details* pane. All other panes are minimized, and appear at the right of the window.

The *Company Name* appears in the title bar at the top of the window. At the bottom of the window is a status bar that supplies information about your environment. **Figure 2-1** shows the status bar.

On the far left is the SYSPRO version and port number, which is useful when reporting issues and requesting assistance. If you click on this the online help is displayed and you are taken to the section covering new features in this version. Next to this is the name of the printer to which you are currently connected, and whether the print preview is enabled or not. If you click on the printer name you are taken to the *Windows Print* screen where you can change printers. If you click on the print preview option it toggles between *On* and *Off*. Next is the SYSPRO company date. Clicking on this allows you to change the company date, if you have permission to do so (*Operator Maintenance* | *Options* tab).

The current operator code, company, and the current role (if the operator belongs to a role) appear on the status bar. Clicking on the operator code allows you to browse on the available operator codes, and clicking on the company allows you to browse on the available companies. In both cases, if the operator has permission, the displayed items can be maintained but not selected. If the operator is linked to more than one role, clicking on the role allows you to change roles.



**Figure 2-1:** The status bar at the bottom of the SYSPRO main menu screen

At the top of most panes are three options, *Menu*, *Auto Hide* and *Close* (see **Figure 2-2**). Depending on security settings, whether the operator belongs to a role, and requirements of the pane itself, some of these options may not be present. The *Close* option removes the pane from the current program.

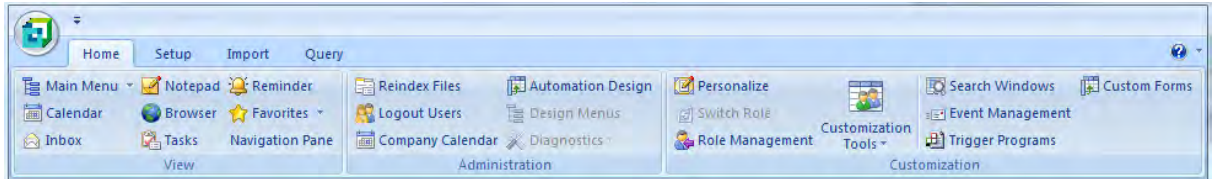
The *Auto Hide* option minimizes the pane to a tab in the current window. The *Menu* option enables the creation of customized panes, as well as the recovery of panes that have previously been removed using the *Close* option.



**Figure 2-2:** The *Menu*, *Auto Hide*, and *Close* options

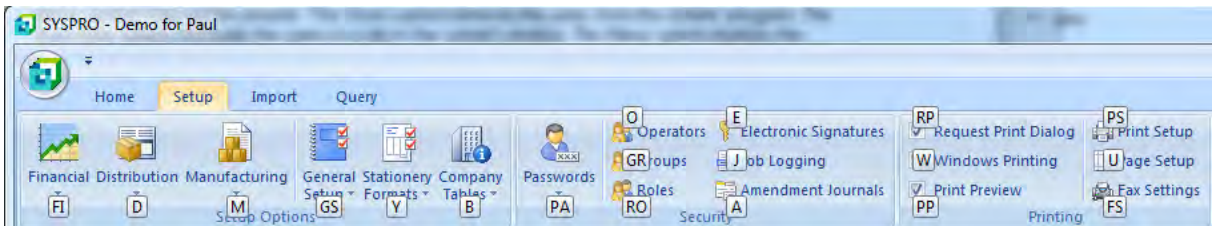
## Ribbon bar

The ribbon bar is configured to appear by default (see **Figure 2-3**). It contains shortcuts to many configuration settings, options and programs. If you prefer the traditional toolbar to perform these tasks you can change over to this by unchecking the *Show Ribbon bar (Personalize | Environment Options tab)*.



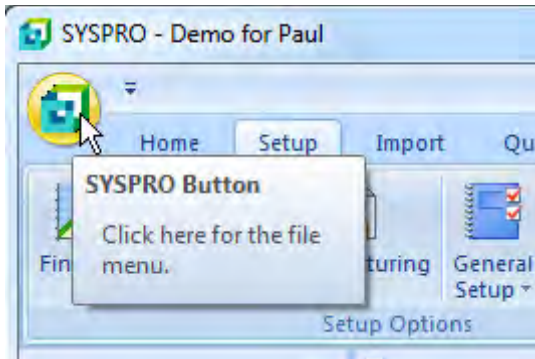
**Figure 2-3:** The *Ribbon Bar*

You do not require a mouse to use the ribbon bar, as it is possible to navigate around the ribbon bar using keyboard shortcuts. If the *Home* tab is displayed (as in **Figure 2-3**) you can navigate to any of the other tabs by pressing the *Alt* key and the first letter of the tab to which you want to go. For example, by pressing *Alt + S* you will be positioned on the *Setup* tab. In addition to placing you on the *Setup* tab, the shortcuts for each of the items on the *Setup* tab are displayed (see **Figure 2-4**). By continuing to hold down the *Alt* key you can call up the program (or sub-menu) that you require. For instance, if you kept the *Alt* key pressed and then pressed the letter *D*, the *Distribution* setup program would be launched.



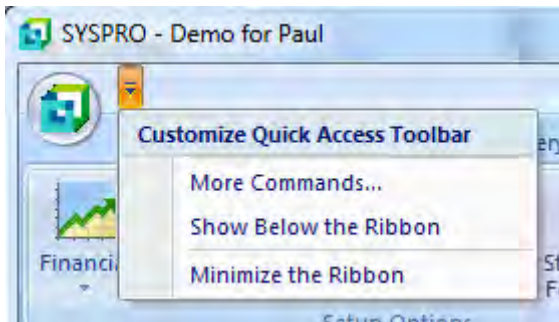
**Figure 2-4:** The *Shortcut Keys* for the *Ribbon Bar*

Several additional options to create new menus, appointments, customers etc., switching companies and changing the company date can be accessed by clicking on the *SYSPRO Button* on the ribbon bar (see **Figure 2-5**).



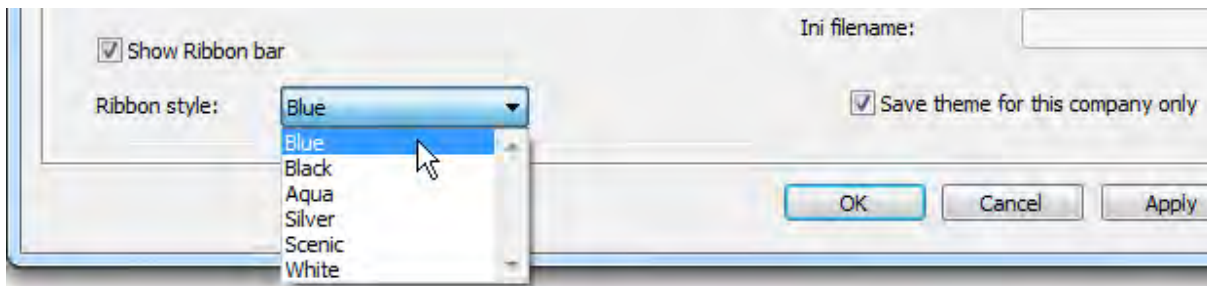
**Figure 2-5:** The *SYSPRO Button*

The ribbon bar can be customized using the menu that appears when you move your mouse pointer over the icon to the right of the SYSPRO button (see **Figure 2-6**)



**Figure 2-6:** Customizing the *Ribbon Bar*

A style can be associated with the ribbon bar. The list of available styles can be found on the *Environment Options* tab of the *Personalize* screen (see **Figure 2-7**). The option *Save theme for this company only* allows you to save the current ribbon bar style, along with any theme that you have set for the current company id. This assists operators that move between companies to recognize which company they are in and also caters for companies that have different corporate colors.



**Figure 2-7:** Applying a style to the *Ribbon Bar*

## Navigation Pane

By default, the navigation pane consists of two panes: The *Recent Programs* pane and the *Calendar* pane. The Recent programs pane keeps a list of the last 20 programs that you have used; the most recent appears at the top of the list, the oldest at the bottom. The number of items in this list is user definable from 0 to 30 (*Personalize | Environment Options* tab | *Most recent programs list contains*). The current list can be cleared out by right-clicking within the *Recent Programs* pane and selecting *Clear List* from the available options.

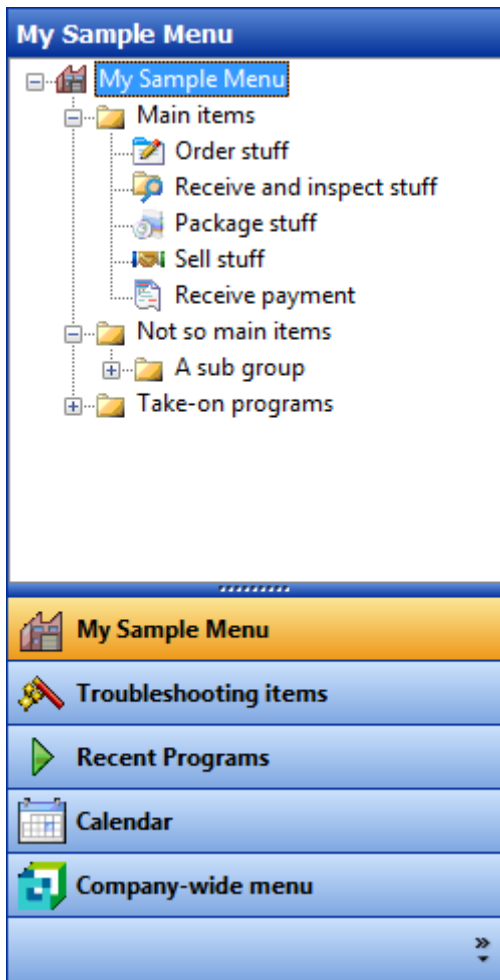
The calendar displays as many months as will fit in the available space, starting with the current month. The calendar can be personalized to specify which day of the week to start on, and to show non-working days such as public holidays in a different color (*Personalize | Calendar* tab).

The navigation pane allows the operator to create additional menus to suit their requirements. These menus can consist of SYSPRO programs, customized reports, Net Express programs, other applications, and SRS reports. **Figure 2-8** shows where an operator has added their own menu to the navigation pane. The normal operator security is in place with these menus, so any program that an operator cannot run from the main SYSPRO menu will also be restricted in the navigation pane. Any fields that an operator is prevented from seeing in a program when run from the normal SYSPRO menu will also be restricted in the navigation pane.

In addition, an operator with sufficient privileges (such as an administrator) can design menus to be implemented system-wide, by role, company-wide or by group. Therefore, an operator may find up to four additional menus appearing (one for each menu type that the administrator can set up) in their navigation pane. The option to allow maintenance of this menu is an operator activity called *Main menu – Allow to design menus* and is disallowed by default (*Operator maintenance | Security* tab | *Activities*). In **Figure 2-8** the menu called *Company-wide menu* was added by the administrator and will appear against all operators that are logged in to this company.



Depending on how much space is allocated to the bottom half of the navigation pane, the options will either appear as buttons (as in **Figure 2-8**), as icons (as in **Figure 2-9**), or a combination of both.



**Figure 2-8:** The full menu names in the *Navigation Pane*



**Figure 2-9:** The available menus for the *Navigation Pane* appearing as icons

### Creating Menus

Menus are created within the navigation pane by right-clicking on the menu button or menu icon, whichever is available, and selecting *Create Menu*.

You will be prompted to enter a *Caption*, which will become the menu title, and an icon. Clicking on the *OK* button will add this blank menu to the navigation pane. Select this menu by clicking on its button or icon, and this empty menu will become the one that is displayed.

Right-click anywhere within this menu and you will be given the options to add a new menu group or a new menu item. When adding a new menu group you are prompted to enter the group description. The group name is just a means of grouping programs/reports. The groups can be expanded or contracted to reduce the amount of screen real estate that is required. You can create groups within a group, as can be seen in **Figure 2-8**.

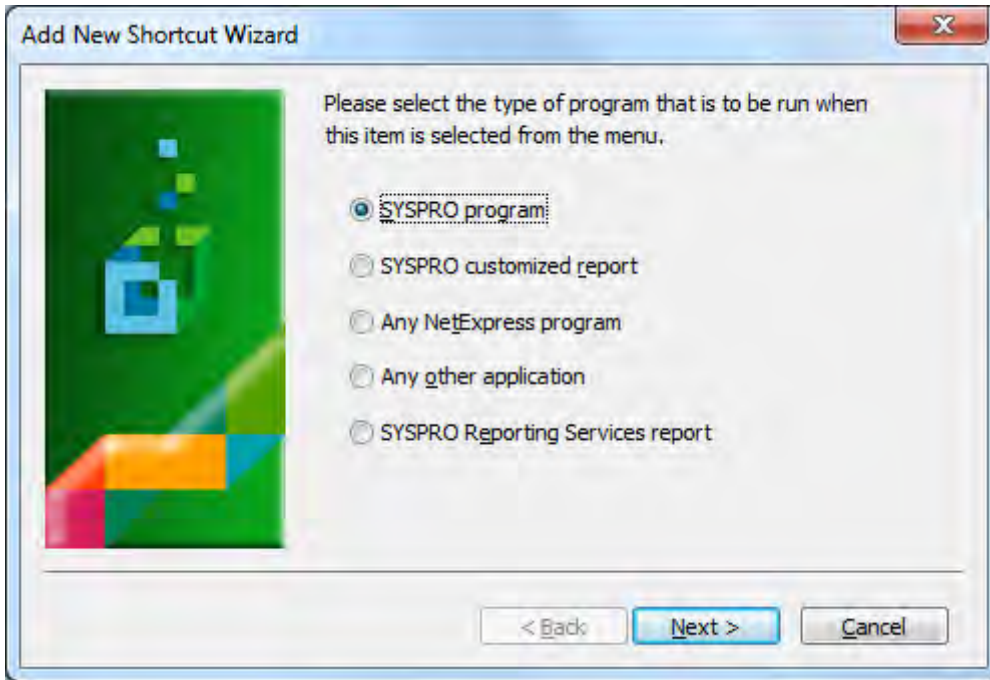
### Adding SYSPRO Programs

The simplest way to add SYSPRO programs to the menu (either directly under the menu title, or to a group) is by locating them in the main SYSPRO menu, then dragging them and dropping them onto the relevant menu group. Once this is done they are available for use immediately. If you want to change the displayed name of the program you can right-click on it and select *Properties* from the displayed menu. Within this screen you can change which program is run, the displayed name and the icon with which it is associated.

The adding of the other types of menu items (as well as a SYSPRO program) is done through the *Add New Shortcut Wizard*, which appears when you right click on the main menu title, menu group or a menu item, and select *New Program*. The wizard displays the five items that can be added. These are *SYSPRO program*, *SYSPRO customized report*, *Any Net Express program*, *Any other application*, and *SYSPRO Reporting Services report* (see **Figure 2-10**).

If you select the SYSPRO program option and click on the *Next* button you will be prompted to enter the program name. You can either supply the program name, or click on the browse button to the right of the prompt (or use the *F9* key to perform the same task). If the browse option is selected, a new screen is displayed listing the modules in the left hand pane, and the programs for the module in the right-hand pane.

Programs that can be called from multiple menus appear under the *System Admin & Shared Program* module name. An example of this is the *Sales Order Entry* program (**IMPO40**) which appears under both the *Sales Orders | Sales Order Processing* menu and the *Accounts Receivable | Transaction Processing* menu under the SYSPRO main menu. You can sort the list of programs by program description or program name by clicking on the relevant column heading.

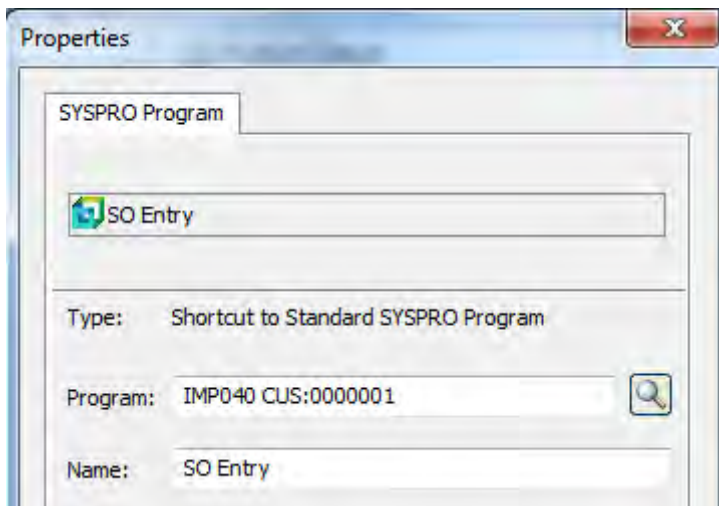


**Figure 2-10:** The *Add New Shortcut Wizard* screen

Locate the required program and click on the *Select* button on the toolbar. You are taken back to the previous screen and the program name is populated for you. Click on the *Next* button and you are presented with a prompt asking you to supply a name for your menu item. This defaults to the description that appears against this program in the SYSPRO main menu. When you click on the *Next* button you will be prompted to select an icon to be used for your menu item. Highlight the icon and click on the *Finish* button. The menu item has been added for you.

Certain SYSPRO programs accept parameters when they are run, and these parameters can be added immediately after the program name. The list of available parameters can be found in the *Program and Function Parameters* section of *Command Line Parameters* in the SYSPRO help. This section of the help specifies the parameter as if it were supplied against the shortcut/icon to run SYSPRO from the desktop or Windows menu. You will need to remove the */link=* parameter if you want to supply them as a parameter to the program name in a navigation pane menu.

For example, the parameter to open *Sales Order Entry* for a specific customer is listed as */link=CUS:xxxxxx* (where *xxxxxx* would be replaced by the customer code). This will be reduced to *CUS:xxxxxx* when it is applied to a program. **Figure 2-11** shows how the parameter is supplied to the *Sales Order Entry* program to call up customer *0000001*.



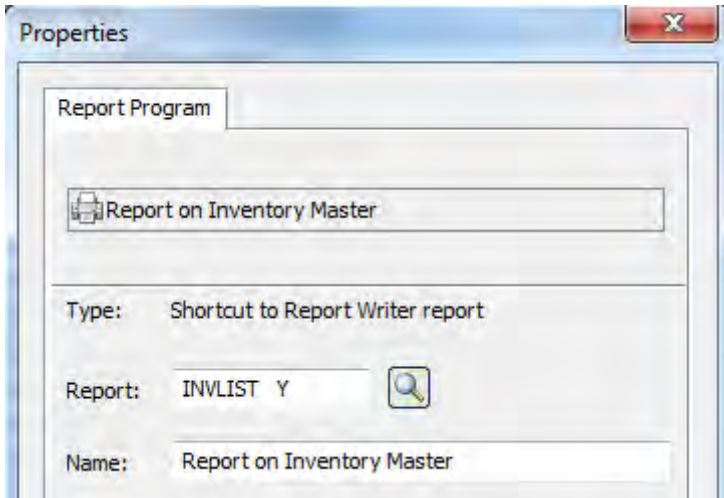
**Figure 2-11:** Adding a shortcut to call a SYSPRO program with a parameter

### Adding Report Writer Reports

When you are in the *Add New Shortcut Wizard*, the *SYSPRO customized report* option allows you to add a report writer report so that it is run without having to supply the report name. After selecting that you want to add a *SYSPRO customized report* and clicking *Next*, you are prompted to supply the report name. You can press the browse button (or *F9*) to call up a browse of all the reports, highlight the relevant one and click on the *Select* button. You are returned to the previous screen and the prompt is populated with the report name. Click on the *Next* button and you are prompted for a description for this menu item. The prompt is pre-populated with the report description. After clicking on the *Next* button you are prompted to choose an icon to associate with this menu item. Once selected, click on the *Finish* button and the menu item is added for you.

When this menu item is selected the report writer program is run. You are not prompted for the report name, as this is already known. If the report contains run time parameters you will be prompted for these on the *Report Options* screen. You can provide an additional parameter to bypass the *Report Options* screen during the print process (the same screen that displays the prompts when the report contains run time prompts) provided that there are no run time prompts for this report.

Report writer report names are up to 10 characters long. By adding a capital *Y* as the 11<sup>th</sup> character of the name you can bypass the *Report Options* screen. This can be done after the *SYSPRO customized report* menu option has been created, by right-clicking on its menu item and selecting *Properties*. If the report name is 10 characters long you just need to add the *Y* as the next character in the name. If the report name is less than 10 characters long you need to add the correct number of spaces so that the *Y* can be the 11<sup>th</sup> character (see **Figure 2-12**).



**Figure 2-12:** Adding a shortcut for a report writer report and providing a parameter

### Adding Net Express Programs

The third option in the *Add New Shortcut Wizard* is to add a Net Express program. After clicking on the *Next* button you are prompted to supply the full path name and program name of the Net Express program. You can use the browse to locate it, and it will only display files with the *.INT* suffix. After locating the program the full path and program name will be populated in the prompt. Click *Next* and you will be prompted for a description for your menu item. Click *Next* and you will be prompted for the icon. Click *Finish* and the menu item will be created for you.

### Adding Any Other Application

The fourth option in the *Add New Shortcut Wizard* is to add *Any other application*. When you click *Next* you are prompted to enter the application name, and optionally a starting folder. If you click on the browse button you can browse for the application name. The default is to look for applications with a suffix of *.exe*. However, you can type in *\*.vbs* against the filename and this will change to browsing for applications with the suffix of *.vbs*.

Once you have located the application and highlighted it, click on the *Open* button and the application name and path name will be inserted against the application prompt. You have the option of entering the starting folder for this application. If you do not enter a starting folder, the application will be run from the SYSPRO *base* folder using this full application/path name. Any files that the application creates without a path name will then be created in the SYSPRO *base* folder.

You can also supply parameters to your application, whether these are hard coded text, or run time variables supplied by SYSPRO. The available variables are *%oper* (the current operator code) *%coid*

(the current company ID) and *%group* (the operator group of the current operator). When used, these must be added to the applications command line after the application name.

After adding the application name/starting folder, click *Next* and you will be prompted to select the icon. Click *Finish* to add the menu item to the menu.

A simple way to validate what will be passed through on the command line to create a batch file that accepts up to nine parameters, and writes each of them out to their own file. The following is from a file called *Test.bat* :

```
@echo Off
Echo %1 > 1.txt
Echo %2 > 2.txt
Echo %3 > 3.txt
Echo %4 > 4.txt
Echo %5 > 5.txt
Echo %6 > 6.txt
Echo %7 > 7.txt
Echo %8 > 8.txt
Echo %9 > 9.txt
```

For example, create a menu item to run this application and pass through the *%coid* variable. Against the application name, supply the full application path name, but leave the *start in* folder empty. When this is run you should end up with nine files (*1.txt* to *9.txt*) in your SYSPRO *base* folder. The first file (*1.txt*) will contain the company ID. All the others will contain *Echo is off*. If the *start in* folder had been provided, the nine files would have been created in the specified folder.

### **Adding SYSPRO Reporting Services Report**

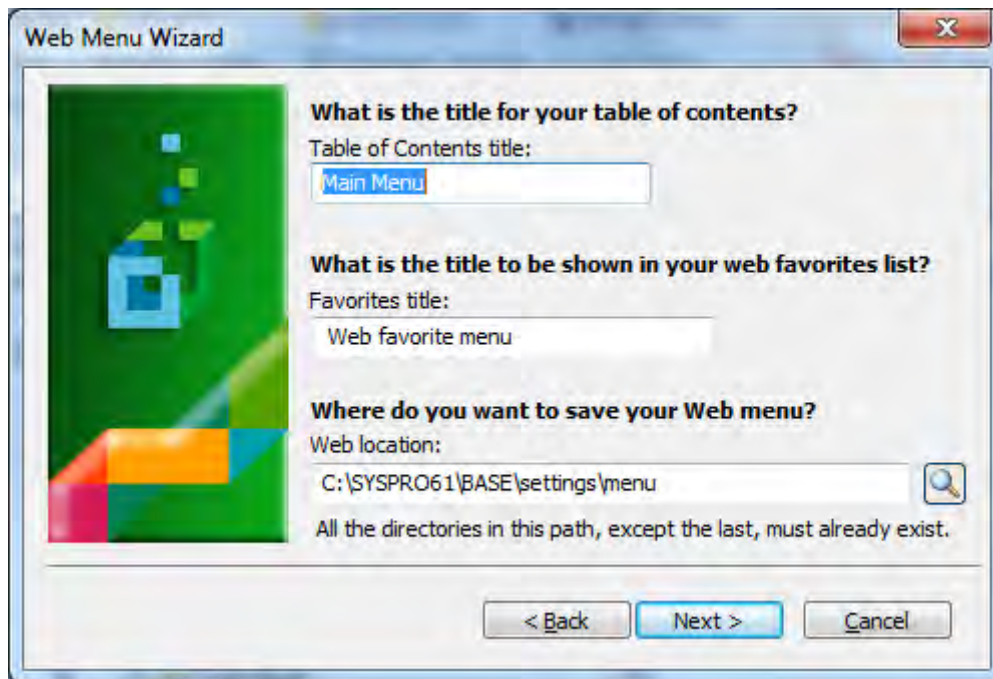
The fifth option is to add a SYSPRO Reporting Services (SRS) report to the menu. When you click *Next* you can choose either a standard report or a user-defined report. If you select *Standard reports* the list of standard reports is displayed in a listview. If you select *User-defined reports* the list of reports that have been created in SRS will appear in the listview. Highlight the report that you want and click on *Next* (or double-click on the report name) and you will be prompted to supply a description for your menu item. Clicking *Next* will prompt for the icon, and after this, clicking *Finish* will add your report to the menu.

## **SYSPRO Main Menu**

The SYSPRO main menu consists of the SYSPRO reports and programs within logical submenus, shown within a treeview. Each item has an icon against it to clarify whether it is a folder, report, configuration program, posting program browse, query, import program, period end program etc. At the bottom of the menu system is *MyMenu* which is a user-specific menu system similar to those in

the *Navigation Pane*. You can remove the standard menu by unchecking the operator option *Enable standard SYSPRO menus (Operator maintenance | Security tab)*.

There are several options which affect the main menu treeview, and they all appear within the *Main menu treeview* section (*Personalize | Environment Options* tab). The first is *Enable hot tracking*, which highlights the current menu/options as the mouse pointer moves over it with a hyperlink. The second is *Display (+) and (-) signs* which enable you to expand/contract the menu system to see what is inside. Without these you are forced to open the submenu to see what it contains, and double-click on it to contract it. The next two options are *Display lines* and *Display lines at root*. These display dotted lines between the parent and child items, and between the *SYSPRO Menu* and *MyMenu* respectively. These can make it easier to see which items fall under which menus/submenus. The last option is *Expand treeview when selecting folders in right hand pane*. When you navigate the *Main Menu* the *Program Details* are displayed in the right hand pane. If this option is checked and you click on a submenu in the right hand pane, it will open the corresponding menu in the main menu.



**Figure 2-13:** Using the *Publish Menu as HTML* option's wizard

If you right-click anywhere on the main SYSPRO menu, or *MyMenu*, you are prompted to *Publish Menu as HTML*. If this option is selected the *Web Menu Wizard* is started. After you click *Next*, a

screen is displayed where you can enter the *Table of Contents title*, *Favorites title*, and *Web location* (see **Figure 2-13**).

After clicking in the *Next* button a screen is displayed. This allows you to check which menu items you want to include in your browser-based menu. The displayed options all fall directly under *SYSPRO menu* and *MyMenu* on the SYSPRO main menu. After selecting which menu items to include and clicking *Next*, you are prompted for a theme for this menu. Clicking on a theme will change the menu preview on the right of the screen. After selecting a theme, click *Next* and *Finish*.

## MyMenu

You can only modify *MyMenu* if your operator code is part of a SYSPRO group that has the *System administrator* option checked, or if the operator option *Enable editing of user menus* is checked (*Operator maintenance* | *Security* tab).

*MyMenu* uses the same wizard for adding menu items/program groups as the navigation pane. The wizard is invoked by right clicking on *MyMenu* (or submenu section if one already exists) and selecting from the displayed menu. In addition to the functionality of the navigation pane wizard, you can copy menus from other operator codes to the current operator using the *Copy Menu From* option. This will replace any existing *MyMenu* that is present for the current operator, and can only be done if the operator option *Enable editing of user menus* is checked (*Operator maintenance* | *Security* tab).

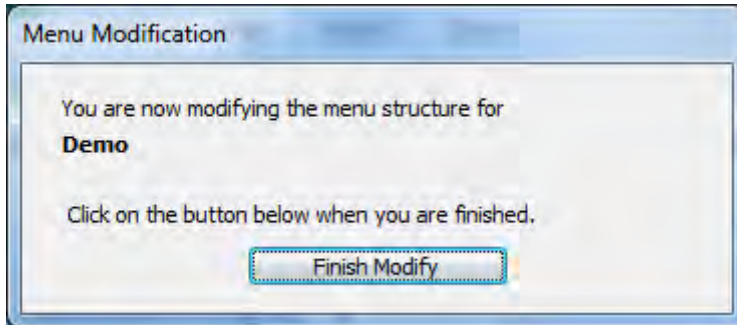
On the same menu that pops up when you right-click on one of the *MyMenu* items, is the option *Copy Menu To*. This option enables the operator to copy their menu to another operator belonging to the same operator group. This option is only available if the option *Enable editing of menus for same group* is checked (*Operator maintenance* | *Security* tab). The screen that is displayed when this option is selected contains a list of other operators belonging to the same group. If you highlight one of these operators and click on the *Copy menu* button, the other operator's *MyMenu* will be overwritten.

Also on the same menu is the option *Modify Other Operator's Menu*. This option is only available if the operator's group has the *System administrator* option checked, or if they have the option *Enable editing of menus for same group* checked (*Operator maintenance* | *Security* tab). If the former is checked, the operator can modify any operator's *MyMenu* option. If only the latter is checked the operator can only modify *MyMenu* for other operators belonging to the same operator group. In both cases you are prompted to supply an operator code, with the option to browse on all operator codes.

Once you have entered a valid operator code and clicked on the *OK* button, your *MyMenu* is replaced by the one belonging to the other operator, and a floating screen is displayed (see **Figure 2-14**)



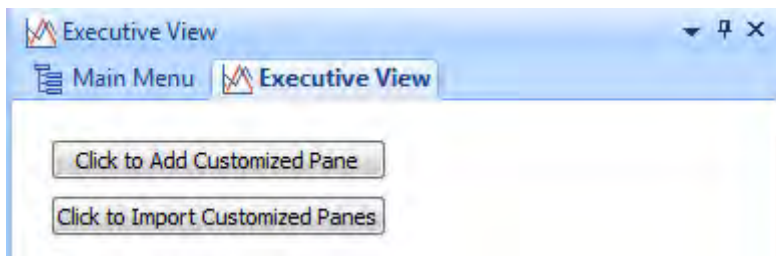
containing a *Finish Modify* button. Once you have finished modifying the other operator's *MyMenu* you click on the *Finish Modify* button. The changes are saved for the other operator and your *MyMenu* is restored. The next time that the other operator logs in to SYSPRO they will get their new *MyMenu*.



**Figure 2-14:** Using the *Modify Other Operator's Menu* wizard

## Executive View

When SYSPRO is loaded for the first time for an operator, the *Executive View* appears as a tab alongside *Main Menu*, and contains the buttons *Click to Add Customized Pane* and *Click to Import Customized Pane* (see **Figure 2-15**).



**Figure 2-15:** The *Executive View* before forms have been added

The executive view is a placeholder for customized panes that you want run before calling up any SYSPRO programs. Customized panes allow the creation of different object types (Graph, Listview, Web Browser, SRS/Crystal Report, PDF Viewer, Rich Text Notepad, .NET User Control, Form, Search Windows, Executive Dashboard). Most of these have pre-defined examples that require no coding and work by double-clicking on them. More information about customized panes appears in Chapter 7.

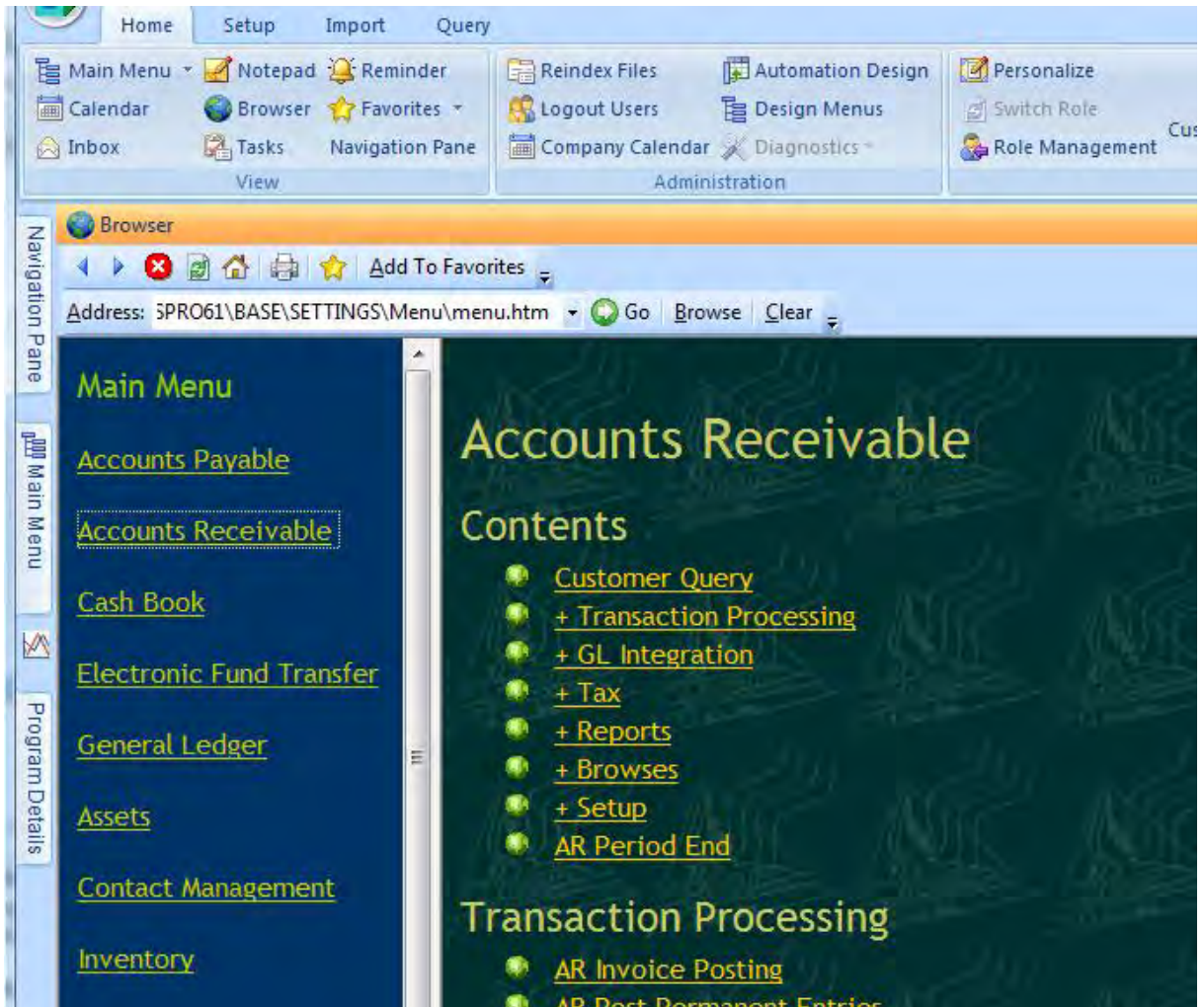


Figure 2-16: A sample Executive View

After adding several customized panes to the executive view, you can move them around within the executive view to suit your requirements, using the docking stickers.

## Browser

There are a couple of things that you can do with the *SYSPRO Browser*. The first is to point it to an existing HTML page. This can be an HTML page on your network (such as a share), on an internal intranet, or on the Internet.



**Figure 2-17:** The menu in a browser after using the *Publish Menu as HTML* option

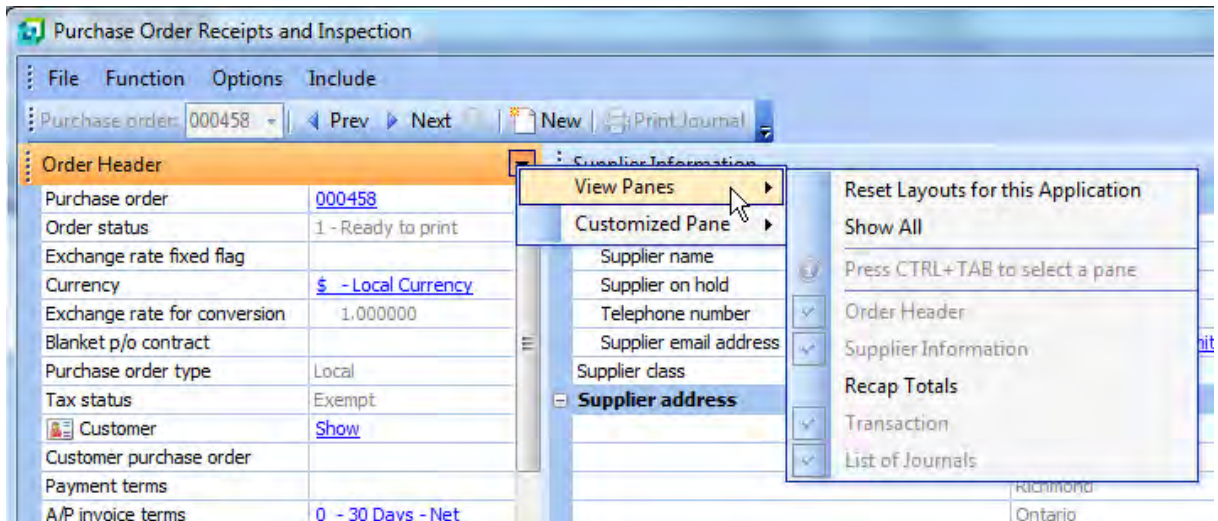
If the option *Reload last web page on startup* (*Personalization | Environment Options* tab) is checked, then whatever URL the browser was pointing to when you closed your SYSPRO session is displayed when next you run SYSPRO.

If you used the *Publish as HTML* option against the main menu, you could display this menu in the browser and remove the main menu for this operator (see **Figure 2-17**).

## Chapter 3 - Moving and Fixing

### Docking Panes

Docking panes are panes that can be moved to different positions on the screen. Most forms, listviews, data grids, customized panes, etc. can perform this task. It is done by clicking on the titlebar and dragging it to a new location. These forms can be closed, repositioned within the current program, configured to float on their own, or contracted down to a tab so that more application workspace is available for other forms. Forms that have been contracted down to tabs will expand when the mouse pointer is positioned over them. When they are in this expanded state, you can click on the *autohide* icon to pin them in their current location.

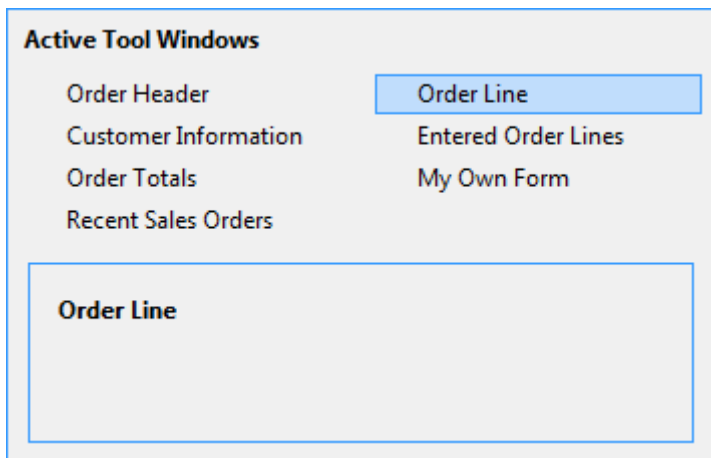


**Figure 3-1:** Using the *View Panes* option to see which panes are not currently displayed

When a pane has been closed it does still exist, and can be restored using the *View Panes* option (*Menu | View Panes*). Closing panes can improve performance in programs such as queries, as while they are closed their values are not being refreshed when the other forms refresh. The panes that are still present will appear in the list and be greyed out. Selecting one that is not greyed out will restore it to its previous location (see **Figure 3-1** where the *Recap Totals* pane is the only pane that is not currently displayed). If you select *Show All*, all the panes will be displayed. If you select *Reset Layouts*

for this Application all the standard forms are restored to their default location as if you had called up this program for the first time. This can be particularly useful if you have been doing extensive customization and gone a little too far.

If you press *Ctrl + Tab*, the *Active Tool Windows* screen will be displayed that contains a list of the main panes for this program (see **Figure 3-2**). By holding the *Ctrl* key down and repeatedly pressing the *Tab* key you can cycle through all the panes in this program. When you release the *Ctrl* key, focus will be set on whichever pane was highlighted in the *Active Tool Windows* list. If the pane highlighted in the *Active Tool Windows* list happened to have been closed, it will be restored and focus set on it.



**Figure 3-2:** The *Active Tool Window*

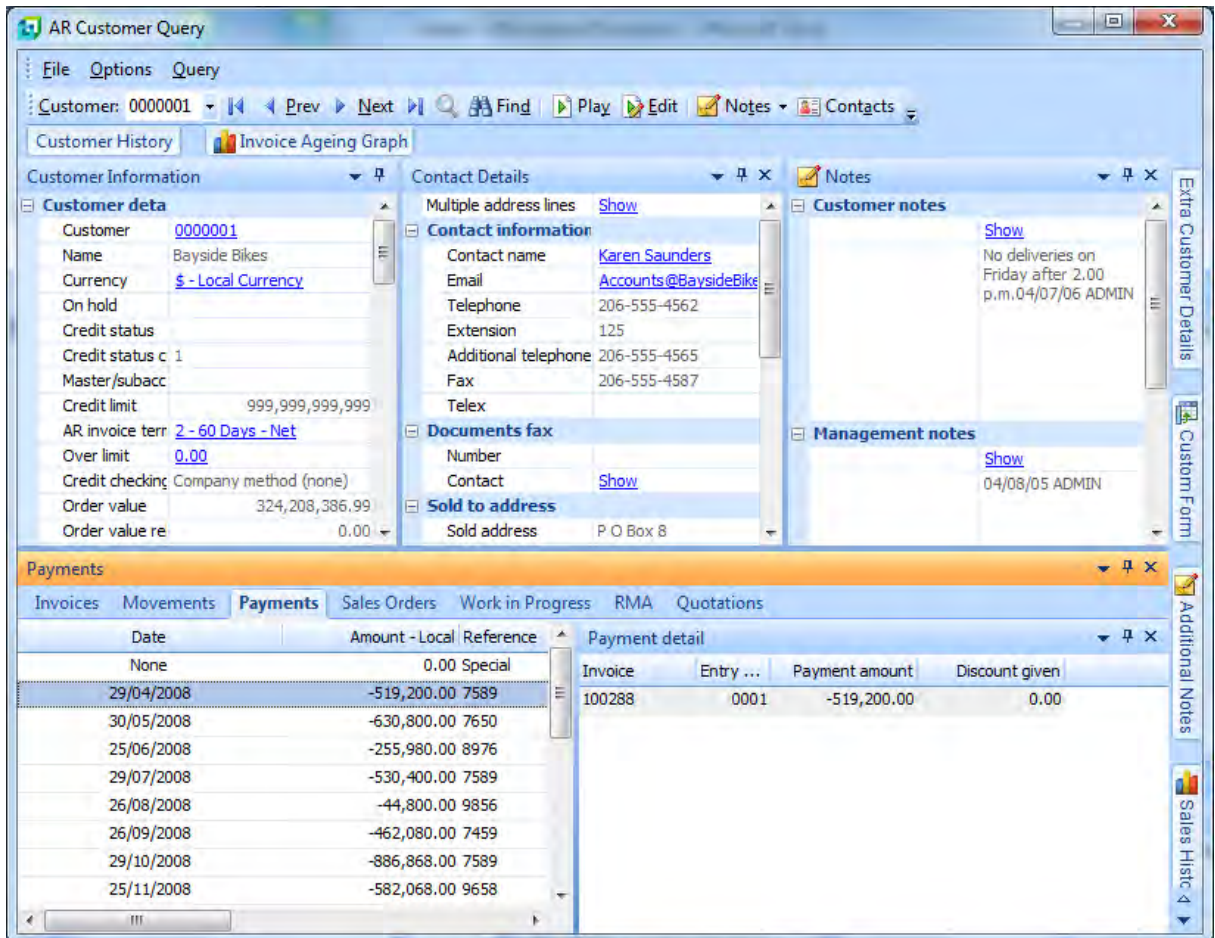
If the pane that currently has focus set on it contains sub-panes, when you press *Ctrl + Tab* it will show these sub-panes in a list, instead of the main panes. For example, in *Sales Order Entry*, if focus is set on the *Order Header* pane and you press *Ctrl + Tab* it will list all the main forms. However, if focus is set on the *Order Line* form and the *Stocked* option is selected, pressing *Ctrl + Tab* will display the list of sub-panes (*Stocked Line*, *Stocked Line Information*, and *Stock Code Information*)

## Docking Pane Layouts

Most SYSPRO applications contain at least one docking layout. A docking layout consists of a group of related „panes“ or windows. Each pane in a docking layout contains a control such as a *Form*, or *Listview*, or *Notepad*, etc. Panes grouped within a docking layout can be freely moved around within the layout for personal preference.

Occasionally, a SYSPRO application contains more than one docking layout and this is implemented to prevent confusion when panes are moved around and docked to a layout which is out of context.

A good example of an application with multiple docking layouts is the *AR Customer Query* program. In **Figure 3-3** the various panes shown are linked to a single docking layout, with the exception of the *Payment detail* pane. This pane has its own docking layout linked to the *Payments* listview pane. This means that the *Payment detail* pane can only be docked adjacent to the *Payments* listview pane – this makes sense since the contents of the *Payment detail* pane is refreshed when you select a new row in the *Payments* listview; in other words, these panes are related.



**Figure 3-3:** The *Customer Query* showing standalone and logically grouped docking panes

Understanding a SYSPRO's docking layout is not normally a requirement. However, when you add a customized pane to a SYSPRO application, it helps to understand that this type of pane will be added to the *current docking layout* – that is, when you click on the *Menu* button (shown in the caption of each pane) to select a customized pane to be added, then the current docking layout is the one associated with the pane in which the menu button resides.

As an example, if you click on the *Menu* button of the *Customer Information* pane, the customized pane will be docked to the left of that pane. However, if you click on the *Menu* button of the *Payment detail* pane, the customized pane will be docked to the left of the *Payments listview* pane.

### Settings That Affect Docking Panes

There are several configuration options that affect the way that docking panes are displayed, and these appear within the *Personalize* section (*Ribbon bar | Personalize | Docking Panes* tab). On the *Docking Panes* tab there is a *Preview* button that enables you to see how the docking panes would be displayed with the settings that you currently have. When this button is selected, a sample program called **IMPMM1** is run that contains two docking panes (a form and a listview). Both the form and the listview are fully-functional (see **Figure 3-4**).

The first option that affects the docking panes is *Show maximize button in caption for adjacent panes*. When this option is checked and there are panes that are side-by-side, the maximize icon appears in the titlebar of all these panes (see **Figure 3-5**). When one of these is clicked the pane is expanded to fill the space of the adjacent panes and its maximize icon is replaced with a restore icon. When the maximize option is used it only affects panes that are alongside the current one, not those above or below.

The second option is *Highlight caption for active pane*. This option highlights the titlebar of the active pane. **Figure 3-4** is an example where this is enabled. The titlebar of the active pane appears in orange. **Figure 3-5** is an example where this is disabled and neither titlebar is highlighted.

The third option *Show floating panes as windows* affects panes that have been dragged from their location and left to float, either over the others in the program, or somewhere else on the screen. If the option is unchecked the pane appears as it did when it was docked inside the program, just on its own. It has its *Menu*, *Auto Hide*, and *Close* icons in the titlebar. If the option is checked the pane is treated as a separate window with a border and the *Menu* and *Auto Hide* icons are not present. The *Close* icon is changed to one that would appear at the top right hand corner of a window. **Figure 3-6** shows a floating pane with this option unchecked on the left, and the same pane with this option checked on the right.



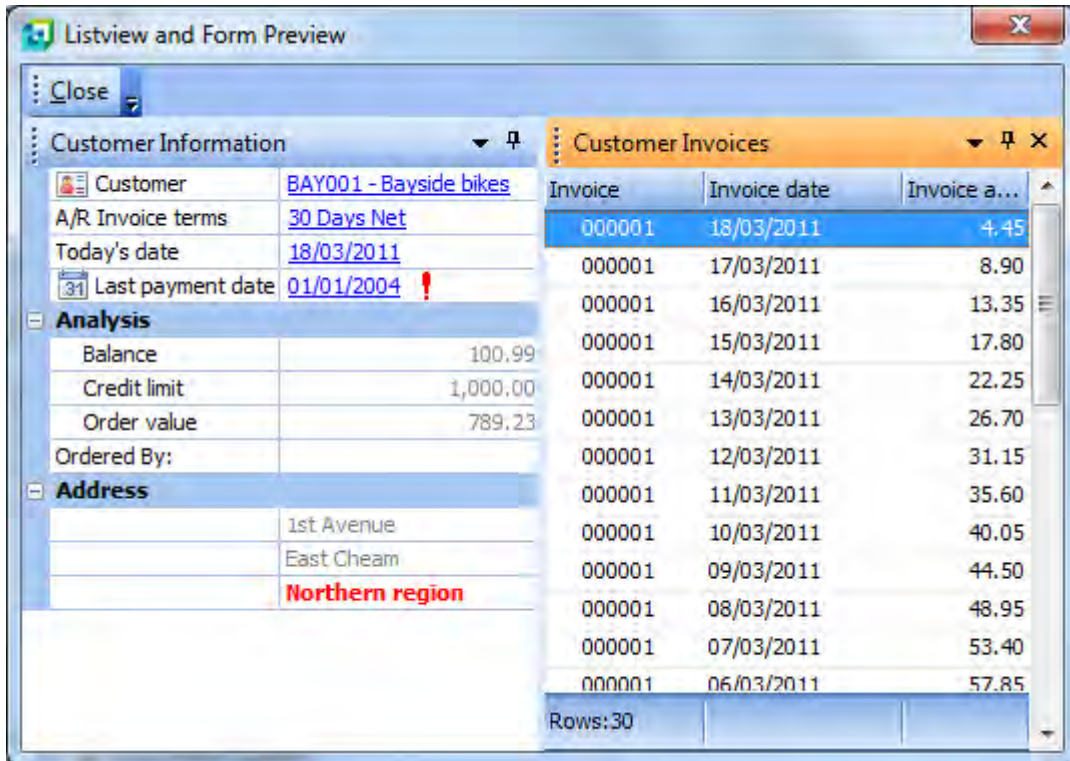


Figure 3-4: The *Listview and Form Preview* screen

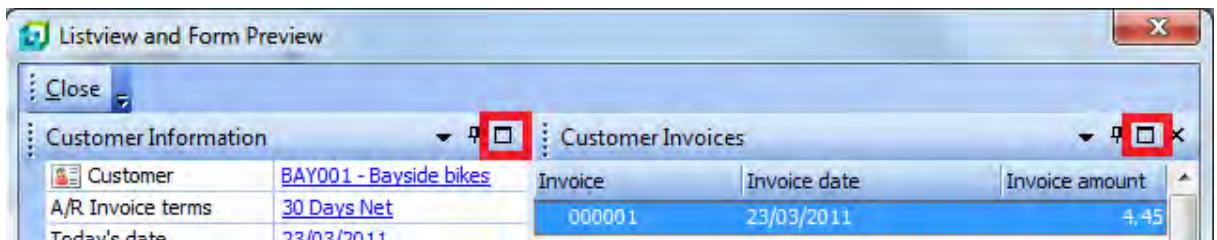
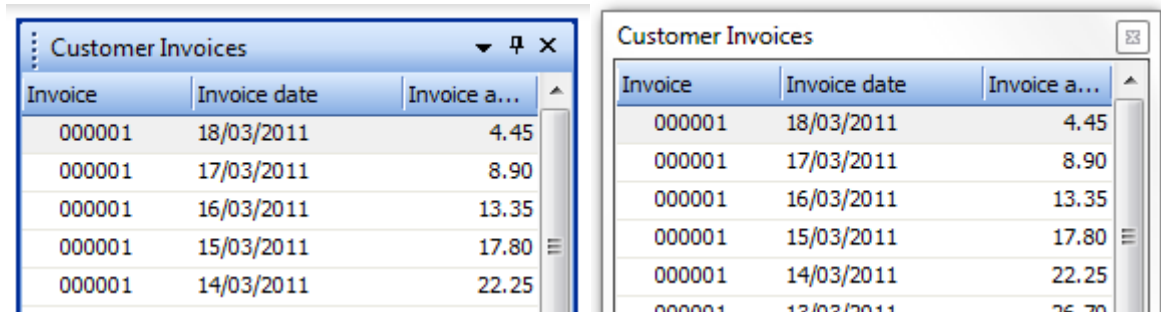


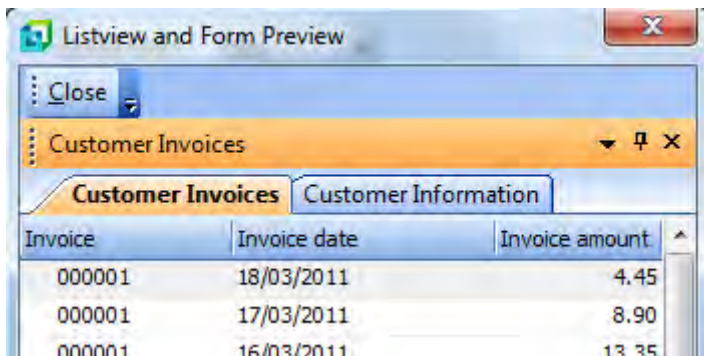
Figure 3-5: The *Maximize* icon at the top of each form

To reduce the amount of screen real estate that is used by a program you can move the panes around so that they become tabbed panes.



**Figure 3-6:** On left the *Show floating panes as windows* is unchecked, and on the right it is checked

The fourth option *Position of tabs for tabbed panes* is a dropdown list that enables you to specify where these tabs should appear. **Figure 3-7** shows the default setting of *Top*, where the tabs are above the panes.



**Figure 3-7:** Using tabs to reduce the required screen real estate

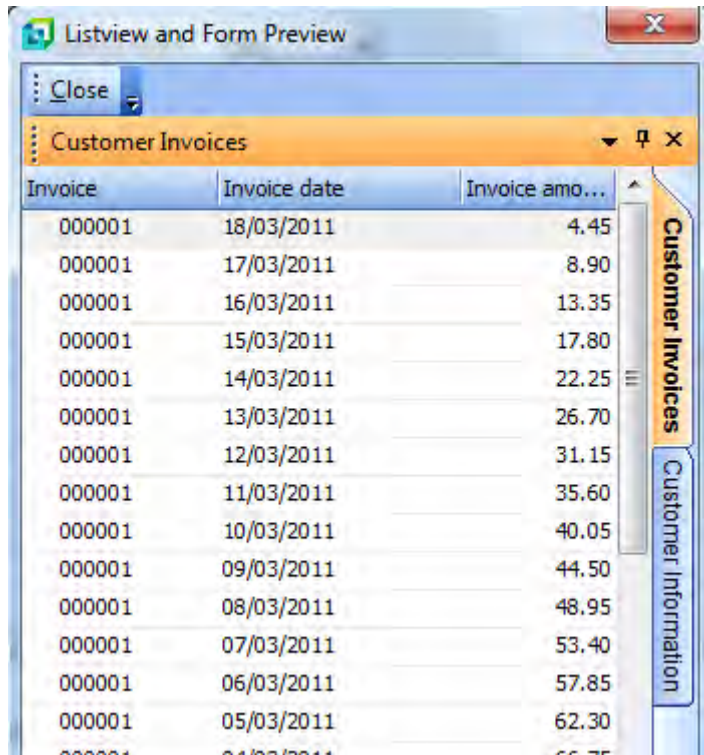
**Figure 3-8** shows the same program with the tabs configured to appear on the right. Further down the list of options is another dropdown list against the *Tab appearance* option. This allows you to change the appearance of the tabs.

There are several options that affect the size and style of the splitter bar (the splitter bar appears between two panes, and when you click and drag it, it allows you to change the size of these panes without changing the size of the window). You can also set a *Docking theme* that changes the style of the titlebar and its icons.

The last option that needs mentioning is *Opacity for inactive floating panes* and is a slider bar that ranges from 0% on the left (meaning solid) to 100% on the right (meaning completely invisible). When you have a floating pane it will appear at this opacity until it is needed, at which time it will appear as

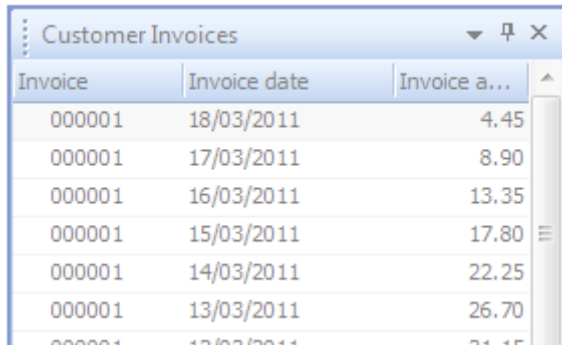
normal/solid again. An example is in the *Purchase Order Receipts and Inspection* program where, once you have supplied a purchase order number, the list of detail lines appears in the *Detail Lines* listview. Alongside this listview is the *Purchase Order Receipt* form which is used to post the receipt when the relevant line is selected.

If the *Purchase Order Receipt* form is dragged so that it is a floating pane, it allows the window of the program to be smaller, or the *Detail Lines* listview to be larger and use up the space that was originally used by the form. If the opacity level is set at 100%, when the program initially loads, the floating pane will be invisible. Only once a detail line is selected will the *Purchase Order Receipts* floating pane appear. After completing this form and clicking on its *Post* button, focus is set back on the *Detail Lines* listview, and the *Purchase Order Receipts* floating pane will disappear until it is required again.



**Figure 3-8:** Changing the *Tab appearance* option so the tabs appear to the right

**Figure 3-9** shows that the *Customer Invoices* pane has been made a floating pane. The opacity level has been set to 85% so that it almost disappears when not in use.



Invoice	Invoice date	Invoice a...
000001	18/03/2011	4.45
000001	17/03/2011	8.90
000001	16/03/2011	13.35
000001	15/03/2011	17.80
000001	14/03/2011	22.25
000001	13/03/2011	26.70
000001	12/03/2011	31.15

**Figure 3-9:** The *Customer Invoices* form as a floating pane, with the opacity level set to 85%

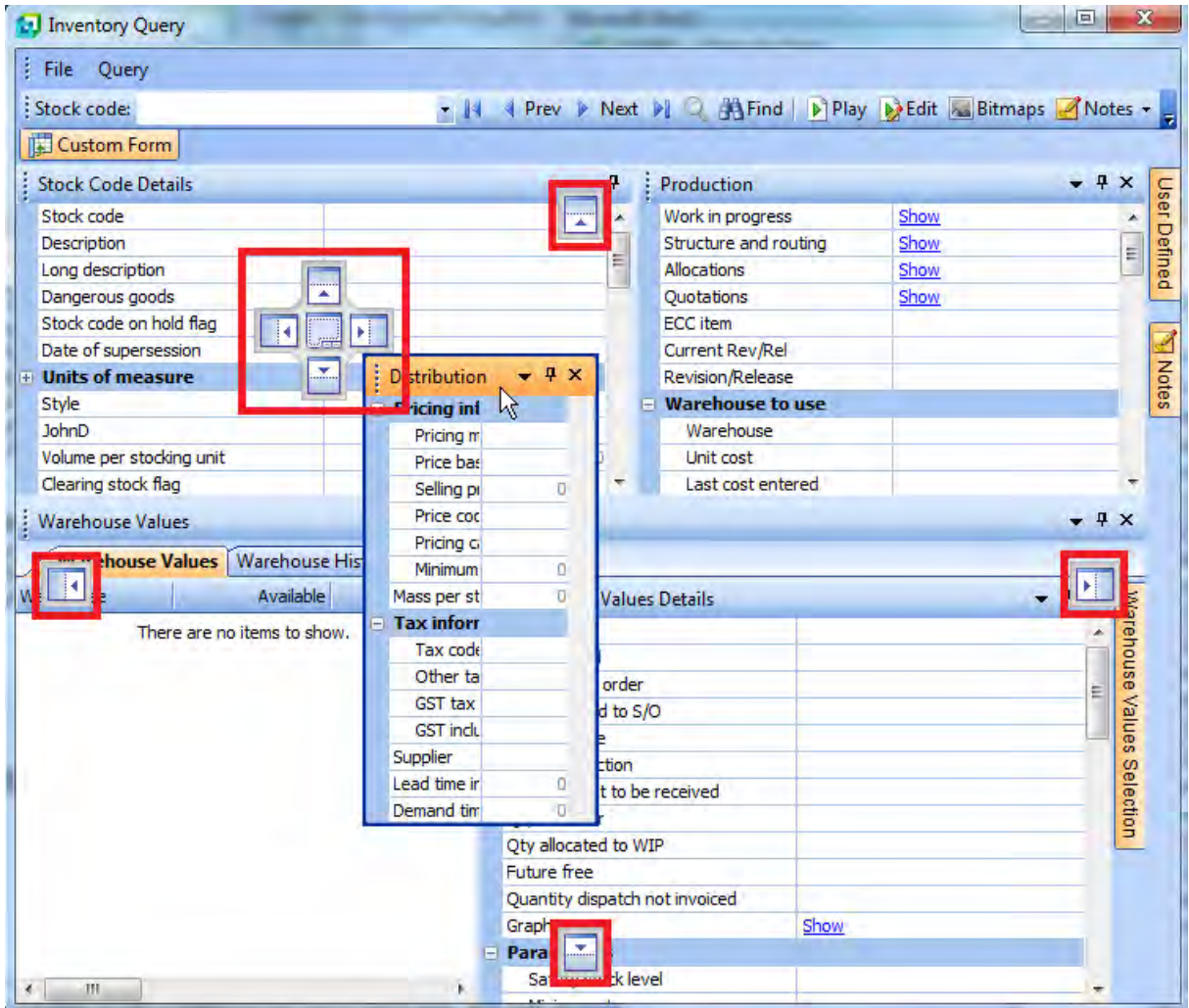
## Docking Stickers

Docking stickers are the little indicators that appear when a docking pane is being moved over a SYSPRO window. There are five docking stickers and they assist you in docking the pane in the correct location (see **Figure 3-10**).

The exact location of the docking stickers is dependent on the layout of the program. For example, if you have a query that contains a row of panes at the top of the screen (and one or more panes below this) the location of the docking stickers (as well as its function) will change as you move the floating pane over other panes on the screen.

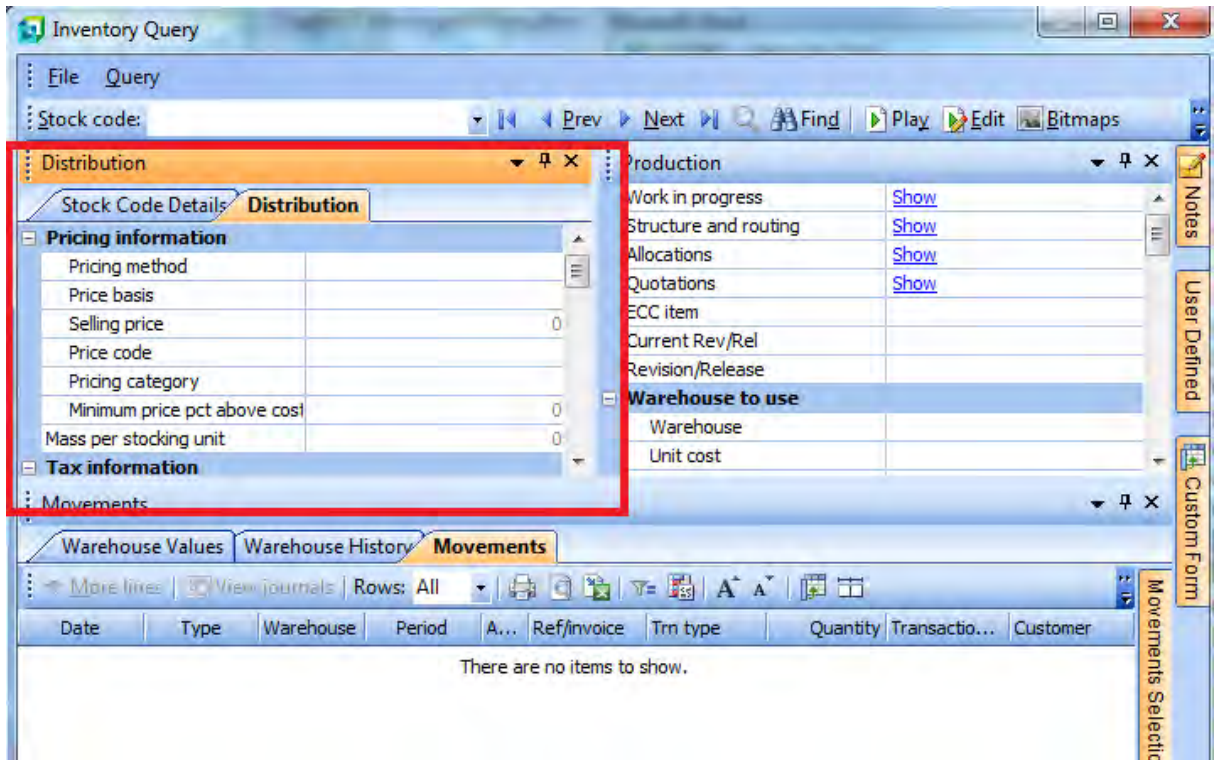
When a pane's titlebar is dragged over a docking sticker, the area where the pane would be docked (if you released it) will be highlighted in blue. You can continue moving the docking pane around the other docking stickers to see where they would dock the pane if it were released. If the docking pane is moved over another docking pane the docking stickers will move in relation to the one over which you are hovering.

You can double-click on the titlebar of a floating pane to return it to the previous position. **Figure 3-10** shows the five docking stickers highlighted. The location of these will change as the *Distribution* form is dragged over the *Production* form, or the listview below it.



**Figure 3-10: Docking Stickers**

The larger of the docking stickers allows you to position the docking pane alongside the pane over which you are currently hovering (to the left/right/top/bottom). It even allows you to combine the one being dragged with the one over which it is hovering, so that they are tabbed (see **Figure 3-11**).



**Figure 3-11:** Tabbed forms

## Titlebar

Each docking pane (form, listview, data grid, etc.) has a section at the top called a titlebar that contains its name. Within any SYSPRO program this title will be unique. The title is used to identify which form you are customizing/removing/reinstating. Normally the titlebar is a block, but if the docking pane has been combined with another so that they have become tabs, it will appear as a tab alongside the other one.

**Figure 3-13** shows the *Inventory Query*. On the top row the highlighted items *Stock Code Details*, *Distribution*, and *Production* are all titlebars. On the bottom row the highlighted items *Warehouse Values*, *Warehouse History*, and *Movements* are also titlebars, but the titlebars of these listviews have been combined as tabs.

If a titlebar contains a row of five stacked dots (known as a gripper), it means that the docking pane can be dragged from its current location (see **Figure 3-12**). Titlebars can also contain buttons on their right-hand side, such as minimize, maximize, auto hide, menu, close etc.

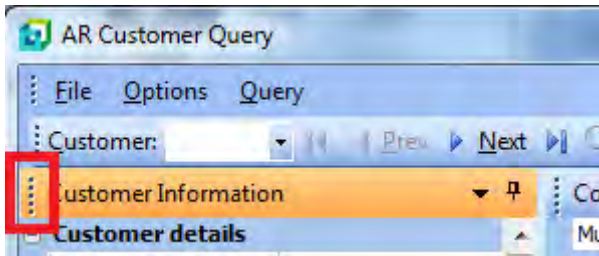


Figure 3-12: A titlebar gripper

## Tabs

There are two types of tabs in SYSPRO, and both are used to reduce the amount of space used. The first type is where two or more docking panes have been combined, and a tab shows for each of these docking panes. The highlighted one will display its values.

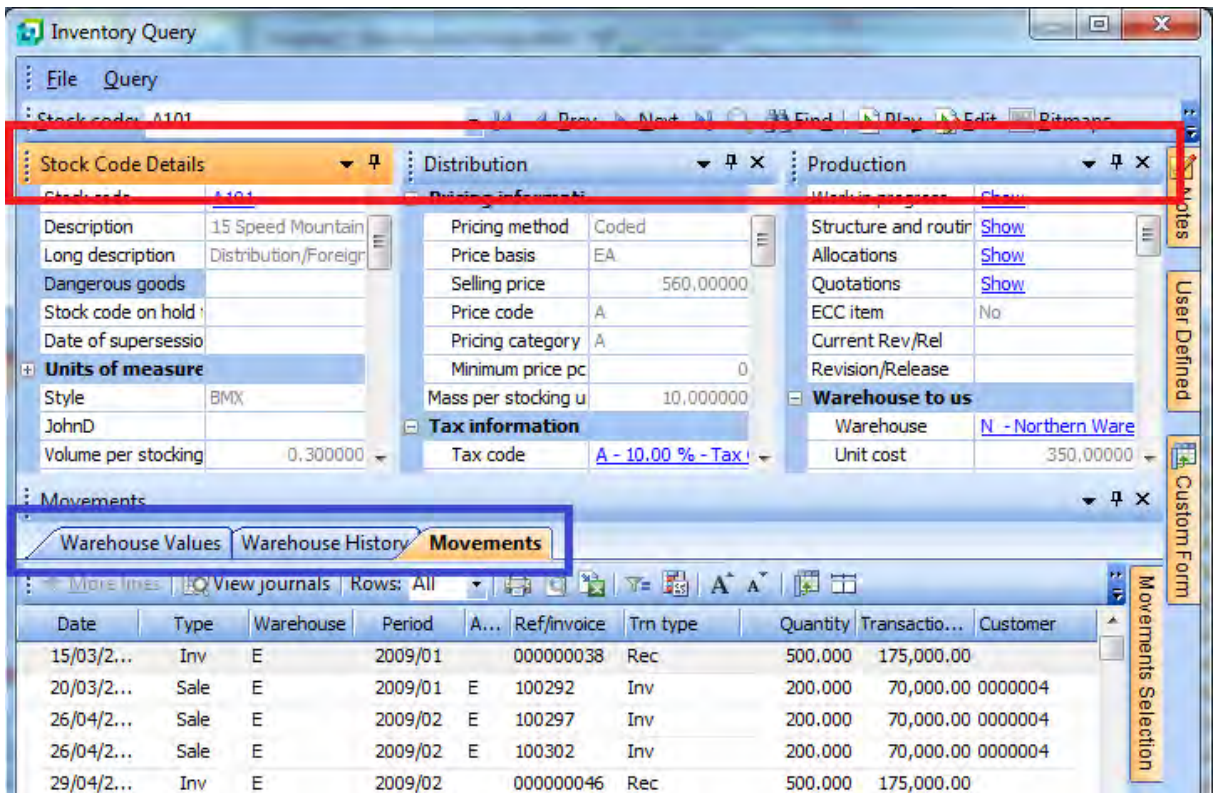


Figure 3-13: Titlebars highlighted above, with the tabs highlighted lower down

In **Figure 3-13** the *Warehouse Values*, *Warehouse History*, and *Movements* listviews are combined to reduce the amount of screen real estate required. As the *Movements* tab is highlighted it is brought to the front and its values displayed. As these are docking panes, any one of them can be dragged from its location and either made a floating pane or relocated with the help of the docking stickers.

The second type of tab is where a docking pane has had its *Auto Hide* button clicked so it has become unpinned, and it has been reduced to a tab somewhere around the screen. In **Figure 3-13** the docking panes *Notes*, *User Defined*, *Custom Form* and *Movements Selection* have been reduced to a tab. If you move your mouse pointer over the tab it will expand to show its contents. In this state, if you click on the *Auto Hide* button, the expanded docking pane will be pinned to its current location. Without expanding a docking pane that has been reduced to a tab you can only right-click on it and select from the displayed menu (to add a customized pane, view the panes, or enter data into it if it is a custom form docking pane).

### Auto Hide

Most docking panes contain the *Auto Hide* button on their titlebar. **Figure 3-14** shows a docking pane that has been pinned in place.

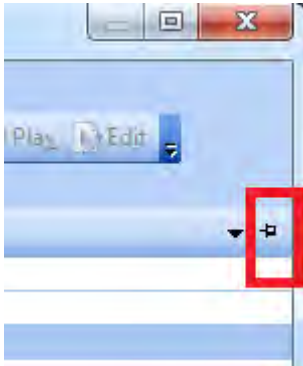


**Figure 3-14:** The *Auto Hide* option when the pane is pinned in place

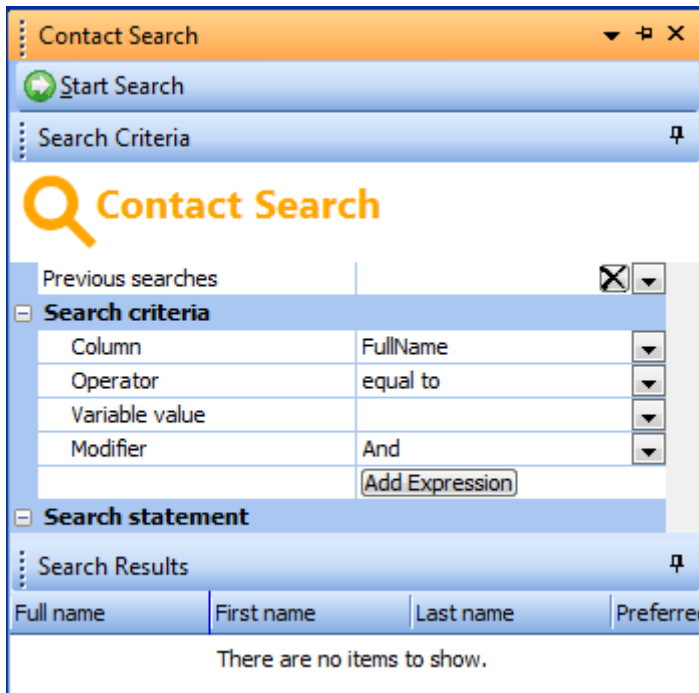
When the *Auto Hide* button is selected for the pane, the pin image is turned on its side (see **Figure 3-15**) and the docking pane is reduced to being a tab around the outside of the program. When you move your mouse pointer over this tab the docking pane is expanded. While it is expanded you can click on the *Auto Hide* button (the pin on its side) and the docking pane will be pinned to its current location.

If you auto hide a floating pane, instead of it appearing as a tab around the outside of the program Window, it minimizes up to just a floating titlebar. **Figure 3-16** shows the *Contact Search* with the *Auto Hide* option unpinned. Whilst focus is set on this pane it will remain as it is. As soon as focus is lost from the pane it will contract so that only the titlebar can be seen (see **Figure 3-17**)





**Figure 3-15:** The *Auto Hide* option when the pane is not pinned in place



**Figure 3-16:** The *Contact Search* as a floating pane with the *Auto Hide* option unchecked, but focus set on it.



**Figure 3-17:** As the *Auto Hide* option is unchecked on the *Contact Search*, when focus is lost it contracts up to just the titlebar.

## Reset Layout for this Application

Against the *Menu* button on the titlebar of a docking pane you will see the *Reset Layout for the Application* option. This option will set the docking panes back to their default positions. However, if *Customized Panes/Associated Panes* have been added to this program they will remain in their current location. This option does not attempt to change the content/sequence of any forms/listviews, just their positioning. Under some circumstances, such as when the operator is part of a role and not in *Design Role Layout* mode, the *Menu* button will not be present.

## Chapter 4 - Forms

Forms are one of the main building blocks of the SYSPRO user interface and are used to display and capture data. They consist of two columns: one containing the captions and the other containing the values. There are three types of forms: display forms, entry forms, and customized pane forms. The customized pane form will be covered under the customized pane section, as it is a type of customized pane.

Order Header	
Sales order	000981
Document type	O
Customer purchase order	HH-78936
Order branch	10
Salesperson	100
Order date	31/08/2011
Ship date	28/10/2011
AR invoice terms	2
Ordered By:	T
+ Order discount percent	
- Tax	
Tax status	Non taxable
Tax exemption	5568817456
Customer tax regn	5559925631
Area	N
Ship via	Ro
Order status	<1> Open order
+ Ship to address	
+ Sales order notes	

**Figure 4-1:** Sales Order Entry *Order Header* form with the field's caption on the left and value on the right

### Field = Caption + Value

On a form, a field consists of a caption and its matching value. On a display form, the value may not be present because there is no value for this field. On an entry form, the value may also not be

present because the value has not yet been entered. Within a form, fields can be moved up or down, grouped, removed, reinstated, and extra fields added. Under some circumstances, fields can be moved between forms in the same program.

**Figure 4-1** shows the *Order Header* form within the *Sales Order Entry* program, which is an entry form. On the left are the captions and on the right are the matching values. The *Sales order* caption and the value of *000981* make up the sales order field.

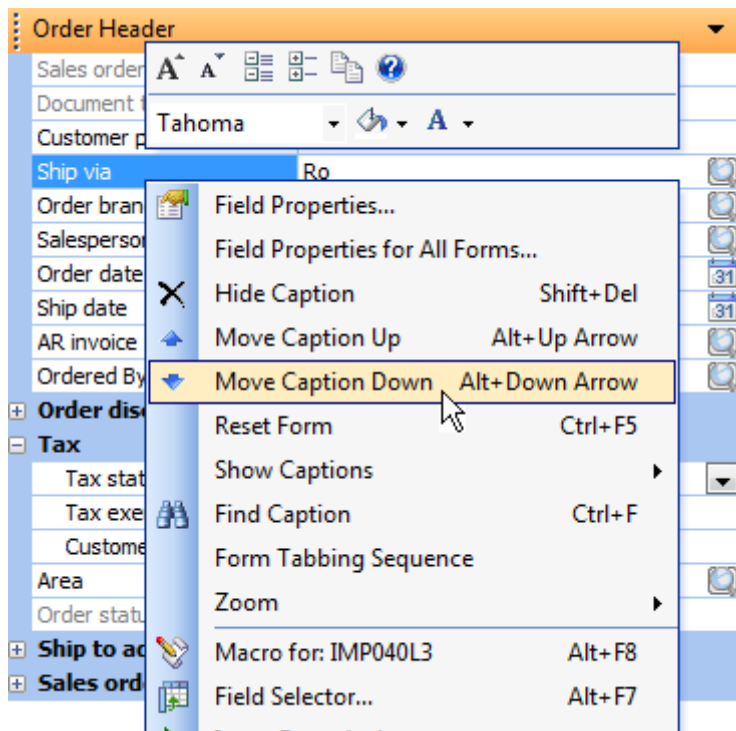
## Moving Fields Up or Down on the Same Form

There are a couple of ways that fields can be moved within the same form. The simplest is to click on the field's caption and, holding down the mouse button, drag the field to the new location. As the field is being dragged over the top of other fields, they will be highlighted. When you release the mouse button, the field being dragged will be inserted above the field that is highlighted.

Order Header	
Sales order	000981
Document type	O
Customer purchase order	HH-78936
Ship via	Ro
Order branch	10
Salesperson	100
Order date	31/08/2011
Ship date	28/10/2011
AR invoice terms	2
Ordered By:	T
+ Order discount percent	
- Tax	
Tax status	Non taxable
Tax exemption	5568817456
Customer tax regn	5559925631
Area	N
Order status	<1> Open order
+ Ship to address	
+ Sales order notes	

**Figure 4-2:** The *Order Header* form after the *Ship via* field has been moved

**Figure 4-2** shows the same *Order Header* form as **Figure 4-1**, but after the *Ship via* field was dragged until the highlighted field was *Order branch*. When the mouse button was released the *Ship via* field was inserted above the *Order branch* field.



**Figure 4-3:** The context-sensitive menu moving the currently highlighted field down

The second way to move fields around on the form is using the context-sensitive menu that appears when you right-click on one of the captions on the form. The *Move Caption Up* and *Move Caption Down* options cause the currently highlighted field to move up or down one field at a time.

The third way to move a field up or down on the form is using the shortcut keystrokes that appear against the *Move Caption Up* and *Move Caption Down* menu items in **Figure 4-3**. The shortcut keystrokes are *Alt + Up Arrow* and *Alt + Down Arrow*. The benefit of using shortcut keystrokes instead of the context-sensitive menu occurs when you need to move a field more than one position, and you don't need to call up the menu multiple times.

You can drag fields into, and out of, groups. If you are using the shortcut keystrokes to move fields up/down and they hit a group that is collapsed, the group will be expanded and the field will continue moving through the group. When it hits the other side of the group it will just continue moving in the same direction.

## Dragging Fields between Forms

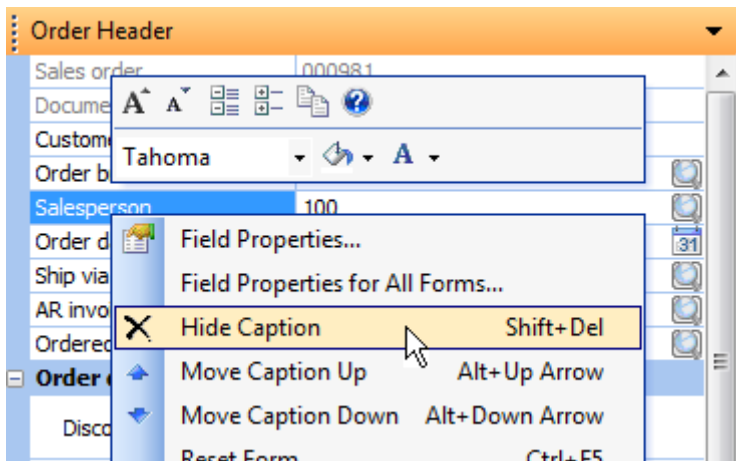
As mentioned previously, there are three types of forms, display forms, entry forms, and customized pane forms. Fields on one form can be dragged to another form within the same program, providing the form types are the same. The exception to this is that fields from an entry form can be dragged to a customized pane form.

A field on a display form can be dragged to another display form and “when released” it will become part of the new form. The field on the new form will contain the correct value for the form from which it came.

For example, in the *Sales Order Entry* program there are forms that relate to the sales order header information, and forms that relate to the sales order detail line information. If a field is dragged from the *Stock Code Information* form (a display form associated with the sales order detail line) to the *Customer Information* form (a display form associated to the sales order header) this field will refresh on the *Customer Information* form whenever the stock code changes, even though the rest of the information on the *Customer Information* form does not refresh.

## Deleting Fields from Forms

It is easy to remove unwanted fields from a form. The process is slightly different for fields that are on the form as standard (or are available for use on the form without using the *Field Selector*) compared to those that are added using the *Field Selector*. Both are removed using the *Hide Caption* option from the context-sensitive menu that appears when you right-click on the caption (see **Figure 4-4**).



**Figure 4-4:** The *Hide Caption* option on the form’s context-sensitive menu

For standard fields, when you select the *Hide Caption* option the field no longer appears on the form. The field is still being populated; it just doesn't appear on the form. It is available for retrieval using the *Show Captions* option and, if retrieved, will immediately contain the relevant value because it is still being populated in the background.

For fields that were added to the form using the *Field Selector* when using the *Hide Caption* option, you are prompted whether the field should be hidden or removed. If the hidden option is selected the field remains, but does not appear on the form. It can be added back to the form using the *Show Captions* option. Scripted fields that perform a calculation will still contain the calculated value but it will not be displayed, so you still have the overhead of performing this calculation.

The *Remove* option of *Hide Caption* completely removes the field from the form, and it cannot be retrieved using the *Show Captions* option. Fields that contained calculated values will no longer be calculated, reducing this overhead.

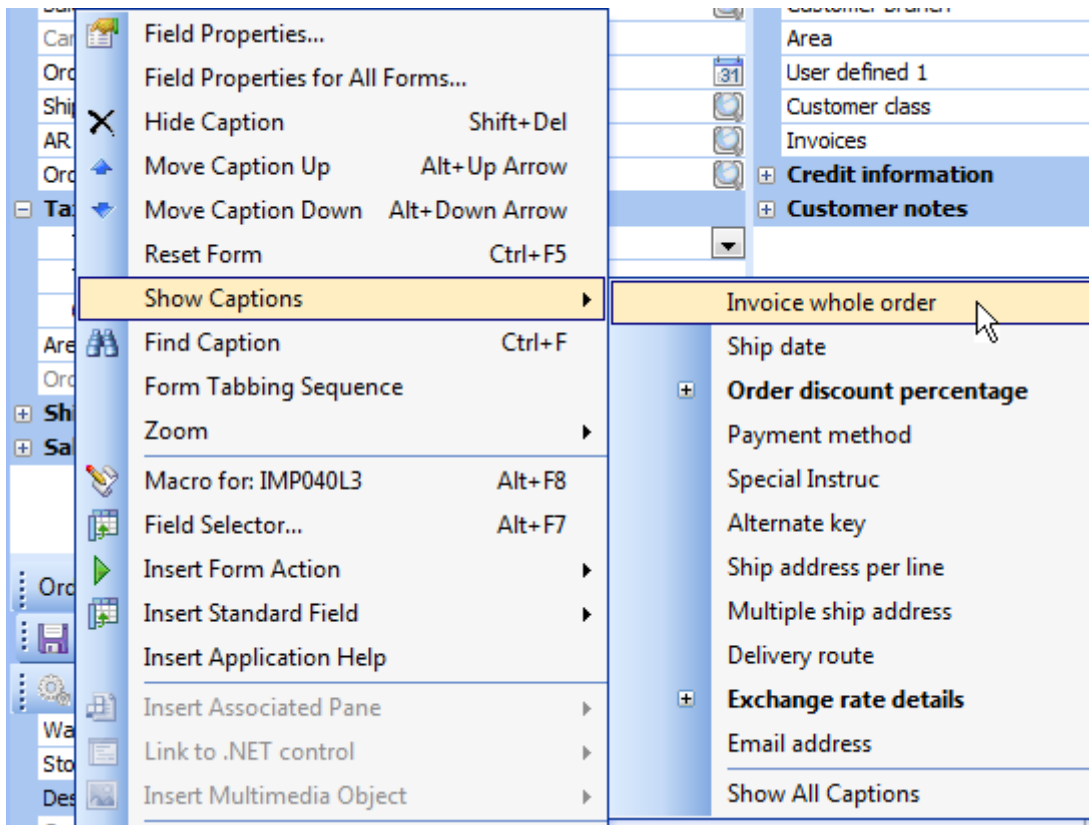
The *Hide Caption* option can be called using the keyboard shortcut *Shift + Del*.

If the *Hide Captions* option is used on a group, the group and its contents are hidden. The group is available to be retrieved using the *Show Captions* option. If the group contains a field that was added using the *Field Selector*, this remains as part of the group and will be retrieved if the group is retrieved using the *Show Captions* option.

Some fields cannot be removed from a form by the *Hide Captions* option. These are known as mandatory fields. If you right-click on one, the context-sensitive menu will have the *Hide Caption* option greyed-out. An example of a mandatory field is the *Stock Code* field on the *Stocked Line* form in the *Sales Order Entry* program. If this field was not present on this form there would be no point in this form being available.

## Show Captions

The *Show Captions* option appears on the context-sensitive menu when you right-click on a form. It contains the fields and groups that are available for use on the form, but are not on the form by default. In addition, it contains fields that were removed from the form using the *Hide Captions* option (providing the *Remove* option was not selected for fields that were added using the *Field Selector*). In **Figure 4-5** you can see a list of the fields and groups that are available to be retrieved against the *Show Captions* option.

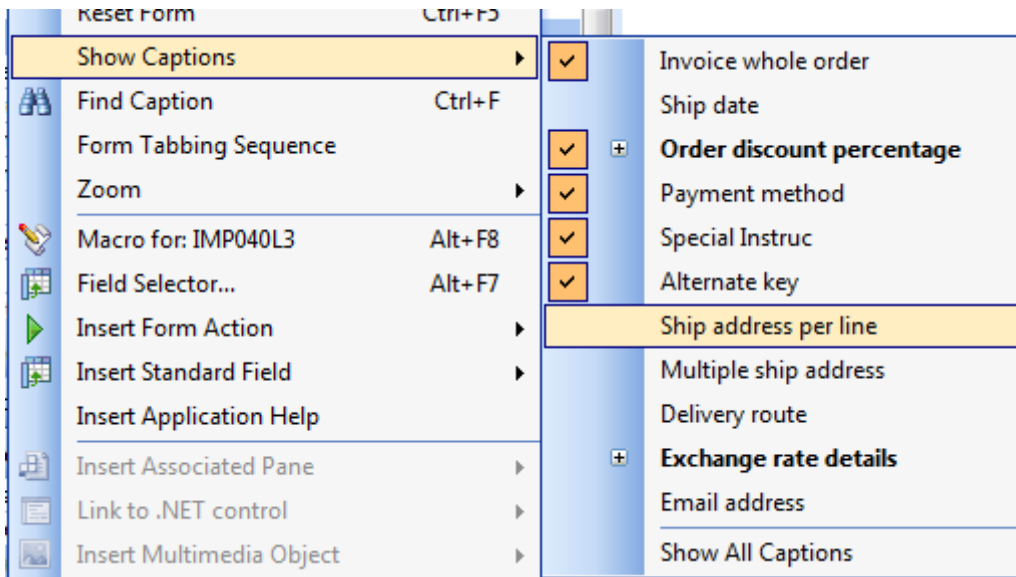


**Figure 4-5:** *Show Captions* listing the fields and groups that can be placed on the form

When the *Show Captions* option is selected, the list of available fields remains until the mouse pointer is removed from the list, so it is possible to select multiple captions from this list (see **Figure 4-6**). When a field is selected a checkmark appears against it in the list and the field is added to the form in the background. If the field has previously been removed from the form it is put back in its previous location. If a field was not previously present on the form, it will be added to the end of the form.

While the list is still present it is possible to unselect a field and the checkmark will disappear. The field will also disappear from the form in the background. When focus is lost from the list it will disappear and all the changes that were made in the background will remain.





**Figure 4-6:** The *Show Captions* list with multiple items selected

## Inserting Standard Fields

The *Insert Standard Field* option is available from the context-sensitive menu that appears when you right-click on a form. It allows you to insert one or more standard fields, comprising of company and operator information. The selected fields are inserted above the currently selected field on the form.

Once inserted, a field is removed from the form by highlighting it and using the *Hide Caption* option from the context-sensitive menu (or using the keyboard shortcut *Shift + Del*).

## Field Grouping

On some forms, related fields are grouped together under a group header. A group can be expanded so that all the fields within it are visible, or collapsed so that only the group header is visible. This can save a lot of screen real estate when collapsed.

**Figure 4-7** shows the *Order Header* form of the *Sales Order Entry* program. On this form there are several groups that are collapsed so that only the group header appears. The group header of each of these has a plus sign next to it. The form also has some groups that are expanded so that you can see the fields that reside within the group. The group header for each of these has a minus sign against it. If the plus sign is clicked the group will expand and if the minus sign is clicked the group will collapse.

The screenshot shows the 'Order Header' form with the following data and layout:

- Order Header** (Section Header)
- Sales order: 000981
- Document type: O
- Customer purchase order: HH-78936
- Order branch: 10
- Salesperson: 100
- Cancelled order: (empty)
- Order discount percentage** (Section Header, collapsed)
- Tax** (Section Header, expanded)
  - Tax status: Non taxable
  - Tax exemption: 5568817456
  - Payment method: Credit
  - Area: N
  - Order status: <1> Open order
- Ship to address** (Section Header, collapsed)
- Exchange rate details** (Section Header, expanded)
  - Fixed rate: Not fixed
  - Exchange rate: 1.000000
- Sales order notes** (Section Header, collapsed)
  - Ordered By: T

Figure 4-7: The *Order Header* form showing some groups expanded and some collapsed

The screenshot shows the 'Order Header' form with a context menu open over the 'Collapse all groups' icon. The menu options are:

- Field Properties...
- Field Properties for All Forms...
- Hide Caption (Shift+Del)
- Move Caption Up (Alt+Up Arrow)
- Move Caption Down (Alt+Down Arrow)
- Reset Form (Ctrl+F5)
- Show Captions

Figure 4-8: The *Collapse all groups* option to collapse all groups on a form

**Figure 4-8** shows the context-sensitive menu that is displayed when you right-click on the *Order Header* form. At the top are buttons to expand all groups and collapse all groups for the current form. The *Collapse all groups* button is highlighted.

If a group header is dragged to another location the group header and the contents of the group are moved to this new location. The group remains in the same state it was in before the move (i.e. if it was expanded, it will remain expanded).

If the *Hide Caption* option is used on a group header the whole group is removed from the form. The group header appears in the *Show Captions* list and is retrieved as a group, if selected. In **Figure 4-6** *Order discount percentage* and *Exchange rate details* are group headers and this can be seen because their names appear in bold and they have a plus sign against them.

Fields can be moved into, and out of groups by dragging them with the mouse pointer.

## Field Selector

The *Field Selector* is available from the context-sensitive menu that appears when you right-click on a form (or using the *Alt + F7* shortcut keystrokes). It allows you to see the fields that are available to be dragged onto the currently highlighted form. On the *Field Selector* window there is a dropdown list that allows you to select from up to three types of fields, depending on which form had focus set on it when the *Field Selector* was called.

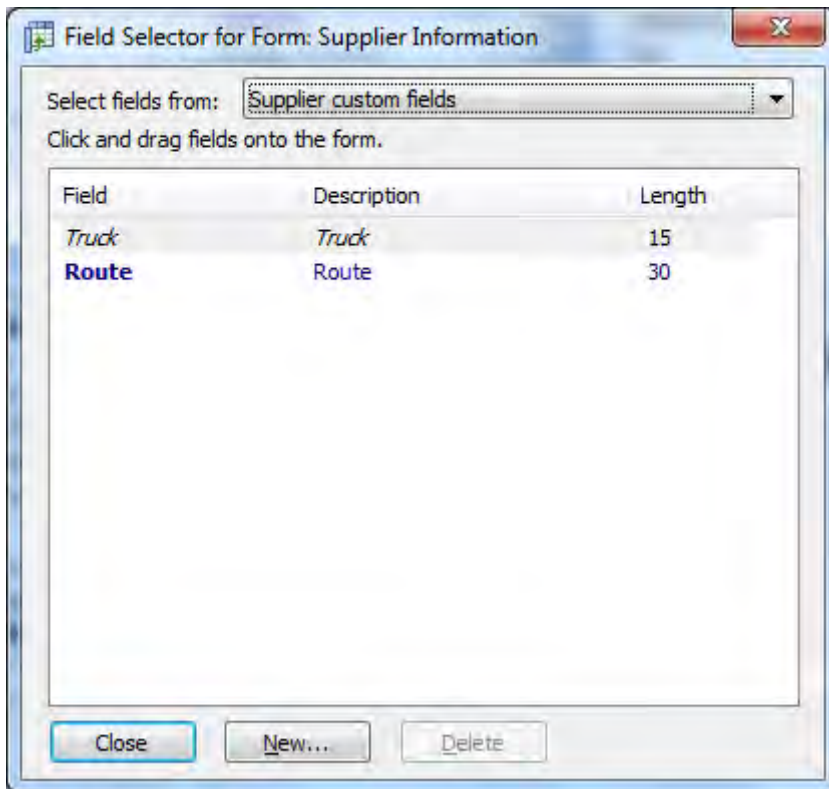
The possible types are: fields from a custom form associated with the primary table for this form (custom form fields), fields from the primary table for this form (related fields), or fields that you have created to contain and display values (scripted fields). Some forms cannot have custom forms associated with them, in which case when one of these forms has focus set on it the *Field Selector* will not include this option. Other forms display transient information (i.e. it is not stored in a data file and only exists in the computer's memory) so that they can have neither custom form fields, nor related fields. In this case the *Field Selector* will only contain the option for scripted fields.

## Custom Form Fields

A *Custom Form* provides a mechanism of adding fields to certain master and transaction tables. The fields are not added to this table, but are added to another table and associated with this record in this table. Custom form fields can be a combination of alphanumeric, numeric, or date, and each table can be associated with up to 100 fields.

There are several ways that custom form fields can be defined, depending on where within SYSPRO you are doing so. Defining the custom form field via the *Field Selector* is available in all these scenarios, so that is what will be covered here.

The custom form fields that appear in the *Field Selector* are related to the form from which the *Field Selector* was called. You need to reside on the form that is related to this master table before calling the *Field Selector*. For example, if you wanted to add a custom form field to the supplier master table, you could do this from *Supplier Information* or *Contact Details* forms in the *Supplier Query* program, or from the *Supplier Details*, *Contact Details*, *General Details* or *Purchasing Details* form of the *AP Supplier Maintenance* program. Some other programs within the *Purchase Order* menu also contain forms that relate to the supplier master table, such as the *Supplier Details* form in the *Purchase Order Entry* program, so you could use one of these.



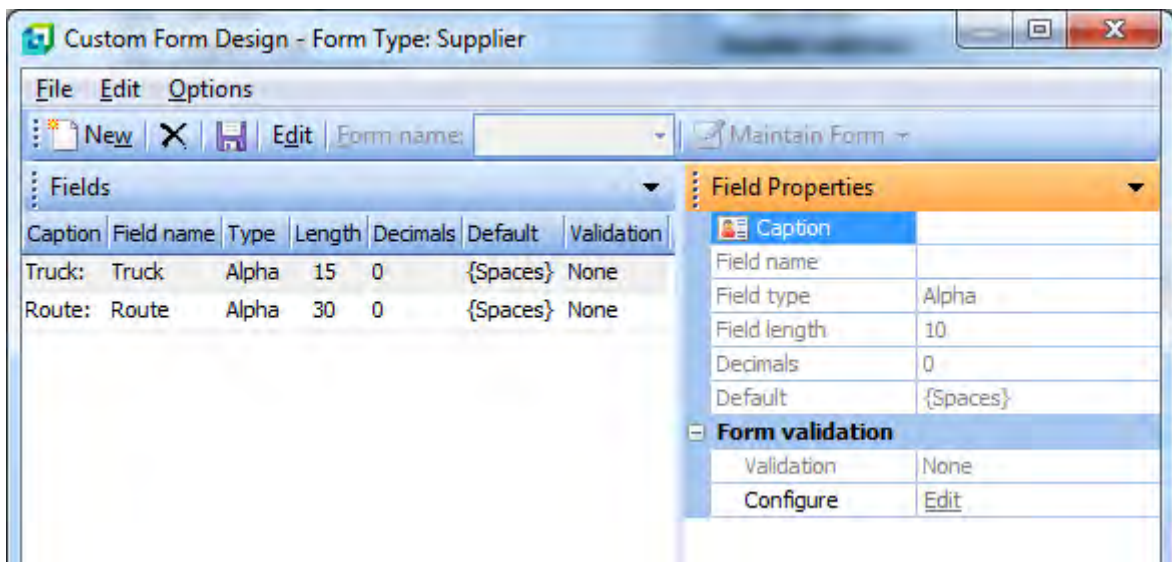
**Figure 4-9:** The *Field Selector* called from the *Supplier Information* form of the *Supplier Query* program showing the custom form fields that are already configured for the supplier master table

When you are on one of these forms the *Field Selector* can be called by right-clicking on the form and selecting the *Field Selector* menu option (or using the *Alt + F7* shortcut keys). If custom forms are allowed for the table associated with this form, the dropdown list at the top of the *Field Selector* will reflect this.

Previously defined custom form fields will be shown on this screen. If any of these fields already resides on the form, its field name and description is italicised.

**Figure 4-9** shows the *Field Selector* as called from the *Supplier Information* form of the *Supplier Query* program. The supplier master table is the table associated with this form and, as custom forms are allowed for the supplier master table, the dropdown list shows *Supplier custom fields*. Two custom form fields have already been defined for this table, and these are displayed. The custom form field *Truck* already resides on the form so its name and description is italicised.

Click on the *New* button to add a custom form field to this custom form. The *Custom Form Design* program is called which allows you to add, maintain and delete custom form fields (see **Figure 4-10**).



**Figure 4-10:** The *Custom Form Design* program for the supplier master table

Click on the *New* button on the toolbar to add a new custom form field. The cursor is positioned on the *Caption* field on the *Field Properties* form. This is the caption that will appear on the form for this field. Care must be exercised that this caption does not clash with an existing/standard SYSPRO field name on any form to which this field may be added. If it does, it will appear italicised in the *Field Selector* before you have dragged it onto the form. Once the *Caption* has been entered, the *Field*

*name* will be created for this field. By default this will use the first three characters of the supplied caption and a three digit number to make it unique. The *Field name* can be changed to any name.

The *Field type* is a dropdown list where you select if this is an alphanumeric, numeric or date field. If Alpha is selected, the *Field length* can be between 1 and 100 characters, and the default value is *{Spaces}* which means that the field will initially be filled with spaces if no value has been assigned to it. This can be changed to any value that you want, providing that it fits within the size that you have specified.

If *Numeric* is selected the *Field length* field defaults to its maximum length of 12 digits and the *Decimals* field defaults to its maximum length of 6 digits (the *Field length* is the number of digits to the left of the decimal point and *Decimals* is the number of digits to the right of the decimal point. So values of 12 and 6 mean the largest number that can be used is 999999999999.999999). By default, the *Default* value will be *{Zeros}* which means that it will be populated with one zero to the left of the decimal point and the full number to the right.

If *Date* is selected the *Field length* is hard-coded to 8 digits and cannot be changed. By default, the *Default* will be *{Today}*.

At the end of the *Field Properties* form is a *Form validation* section. Its *Validation* field defaults to *None* for all three data types. The *Validation* field contains a dropdown list of possible validation types. These appear below, along with the first letter of the field types that use them.

- None – A/N/D (Alpha/Numeric/Date)  
No validation is performed
- Spaces/zeros disallowed – A/N/D  
The simplest form of validation, it ensures that something must be entered against this field before saving the form.
- List – A/N/D  
This allows the entry of up to 20 values that will appear in a dropdown list against the field. When data is added to this custom form field (at the point of saving the values) a check is made to ensure that the entered value matches one of those in the list. If it doesn't, a warning is displayed and the data is not saved.
- Range – A/N/D  
Allows you to specify a *From value* and a *To value*. When data is added to this custom form field (at the point of saving the values) a check is made to ensure that the entered value falls between these two values. If it doesn't, a warning is displayed and the data is not saved.

- Lookup (mandatory) – A  
Allows you to supply an almost unlimited number of values that will appear in a browse, along with their matching descriptions. If you do not either manually enter one of these values, or select one from the browse, you will not be able to save this primary field.
- Lookup (not mandatory) – A  
Allows you to supply an almost unlimited number of values that will appear in a browse, along with their matching descriptions. No check is made (when saving the primary field) whether data has been added to this custom form field. If data has been added, no check is made to ensure that it is one of the available values in the browse.

Custom form fields can be dragged from the *Field Selector* and dropped on the form from which the *Field Selector* was run. These fields will be added to this form at the location where they were dropped. This field on the *Field Selector* will have its name and description italicised to show that it has already been added to the form.

Certain programs (such as queries for master fields) have a separate form called *Custom Form*, which contains all the custom form fields for the matching master field.

The screenshot shows the 'AP Supplier Query' application window. The 'Supplier Information' pane displays the following data:

Supplier details	
Supplier	0000001
Name	Bicycles Unlimited
On hold	
MyNumericField	0.000000
MyAlphaField	CCCC
Supplier type	Permanent
Currency	\$ - Local Currency
Bank	FB - First United Bank
AP invoice terms	0 - 30 Days - Net
Truck	15489B
Discount percentage	0.00
Cash projections - an	
Past due	7,618,630.15

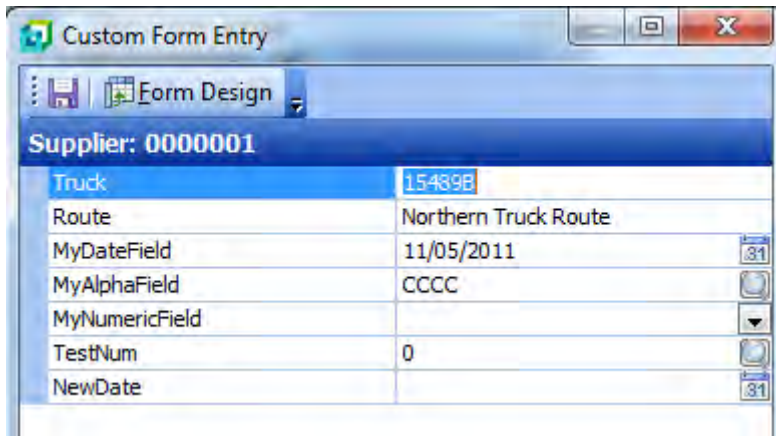
The 'Custom Form' pane displays the following data:

Truck	15489B
Route	Northern Truck Route
MyDateField	11/05/2011
MyAlphaField	CCCC
MyNumericField	0.000000
TestNum	0
NewDate	

**Figure 4-11:** The supplier *Custom Form* in the *AP Supplier Query* program

**Figure 4-11** shows the supplier *Custom Form* in the *AP Supplier Query* program. As the supplier code is entered, the values for all the fields on the *Custom Form* are populated with values. If you double-click on any of the captions or values on this form, the *Custom Form Entry* screen is displayed. You can change the values for these custom form fields within this screen (see **Figure 4-12**). When saving, if any of these values do not meet the requirements for the relevant field, a warning message will be displayed.

On the *Custom Form Entry* screen toolbar is a *Form Design* button (see **Figure 4-12**). If selected, this calls up the same *Custom Form Designer* as seen in **Figure 4-10**. Once custom form fields have been added, if you attempt to save this master record, or move to another one, any validation that was specified for any custom form field will be performed.



The screenshot shows a window titled "Custom Form Entry" with a "Form Design" button in the toolbar. Below the toolbar, the text "Supplier: 000001" is displayed. A table contains the following fields and values:

Truck	15489B	
Route	Northern Truck Route	
MyDateField	11/05/2011	31
MyAlphaField	CCCC	
MyNumericField		
TestNum	0	
NewDate		31

**Figure 4-12:** The *Custom Form Entry* screen where the values of the custom form fields can be updated

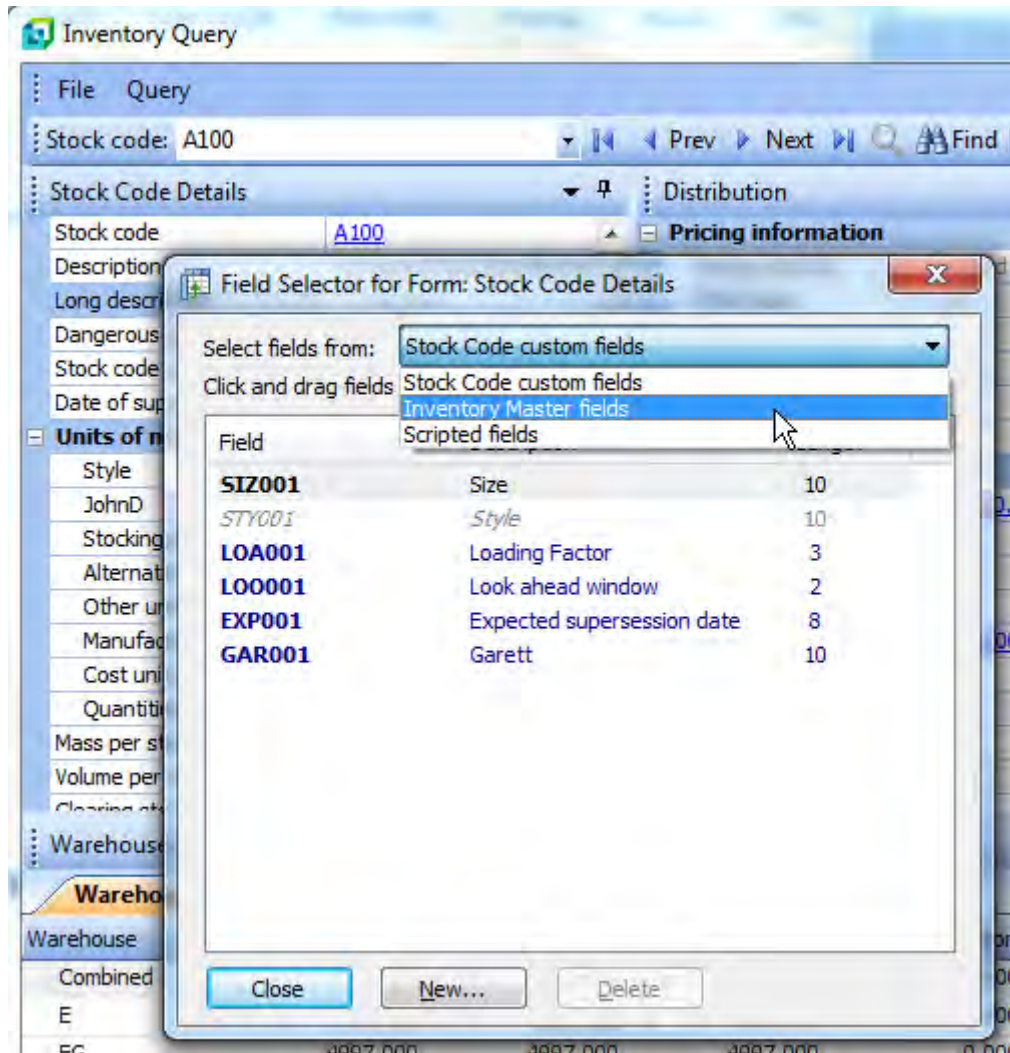
## Related Fields

When a program is run for the first time, each form will display the fields that the Developer decided were most likely to be required by the user. If there are only a small number of fields on the table, the form will most likely contain all the fields. If the table contains a significant number, the Developer may make some available via the *Show Captions* option from the context-sensitive menu.

If the main table for the form contains many fields, the Developer makes the most significant ones available and the others are available as related fields. You access the related fields using *the Field Selector*. The dropdown list at the top of the *Field Selector* will contain the name of the master table associated with the form on which you currently reside. **Figure 4-13** shows the *Inventory Master fields* option in the dropdown list against the *Field Selector*. This is because this table contains the related fields for the *Stock Code Details* form.



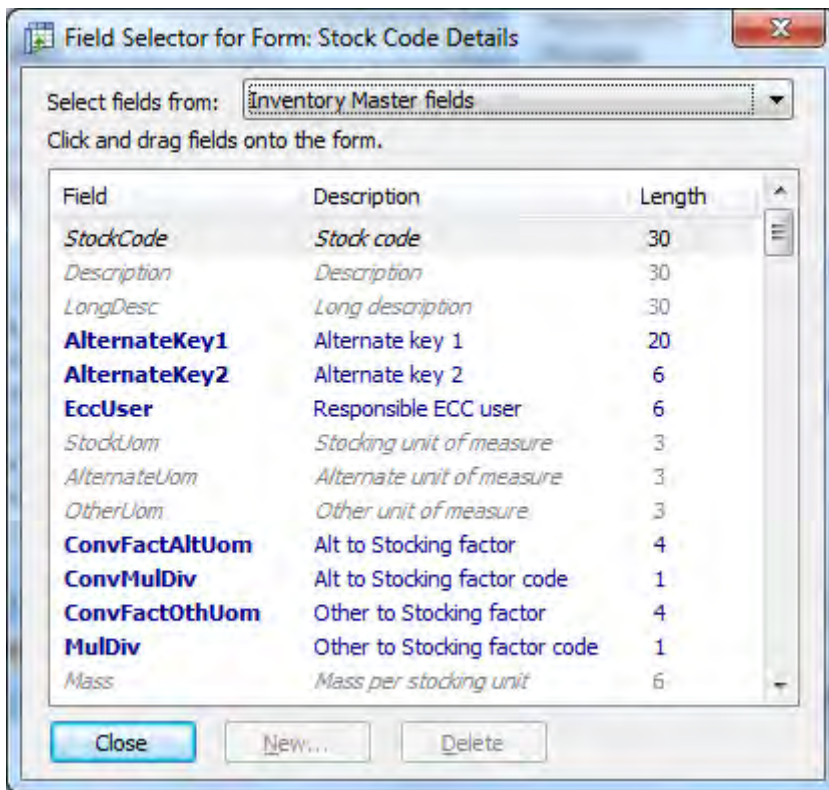
Once this option is selected, the complete list of available related fields for this form is displayed. In the example used in **Figure 4-13** (where the related table is the *Inventory Master* table) the list of fields from this table is displayed together with their matching descriptions and field length. Fields that already appear on the form (or against the *Show Captions* option) are displayed italicised. **Figure 4-14** shows the next step after **Figure 4-13**, where the related fields (from *the Inventory Master table*) appear in the *Field Selector* and those that already appear on the form are italicised.



**Figure 4-13:** The related field (*Inventory Master fields*) option for the *Stock Code Details* form

Any of the fields that appear in this list that are not italicised can be dragged from this list onto the form on which you resided before calling up the *Field Selector*. When you release the mouse button the field will be inserted on the form and its matching entry in the *Field Selector* will become italicised.

The ability to add related fields to a form is so that the contents of the master file can be displayed. If a related field is added to an entry form, the field (both caption and any value that is displayed) will appear as a read-only field. Even if you manage to change the displayed value programmatically, using VBScript, the changed value will not be written back to the master file.



**Figure 4-14:** The related fields in the *Field Selector* for the inventory master table showing which fields are already present and which can be added

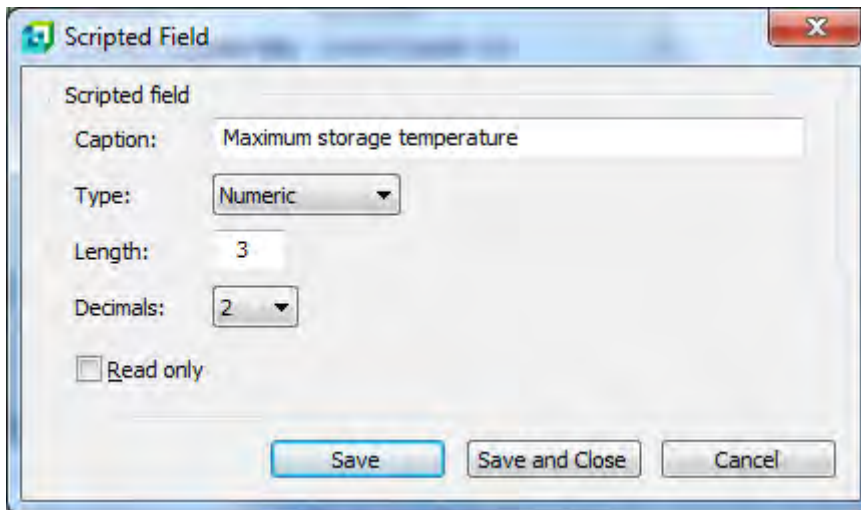
## Scripted Fields

*Scripted Fields* are placeholders that are used for displaying data. Although they have to be mentioned here because they appear in the *Field Selector* alongside the custom form and related fields, they

don't really belong in this document as their values are populated or saved using VBScript, so fall outside its scope.

When adding a scripted field you supply a description and the field type. The field's type can be defined as *Alpha*, *Numeric* or *Date*. An alpha field can be up to 100 characters long, a numeric field can be up to 12 digits to the left of the decimal place with up to 6 decimal places and a date will always be 8 digits long. The scripted field can also be specified as *Read only*, meaning that the value cannot be overwritten by the operator using the keyboard. **Figure 4-15** shows the adding of a numeric scripted field with a *Length* of 3 and *Decimals* of 2. This means that the value of this field can be between 0.00 and 999.99.

In the same way as all the other types of fields in the *Field Selector*, if this field is dragged onto a form the entry in the *Field Selector* becomes italicised.



**Figure 4-15:** Creating a numeric *Scripted Field*

## Reset Form

The *Reset Form* option is available from the context-sensitive menu that appears when you right click on a caption of a form, or by using the shortcut keystrokes *Ctrl + F5*. When this is selected it provides two options: *Restore captions only* and *Reset the form*. The *Restore captions only* option retrieves all fields that have been hidden/removed from the form.

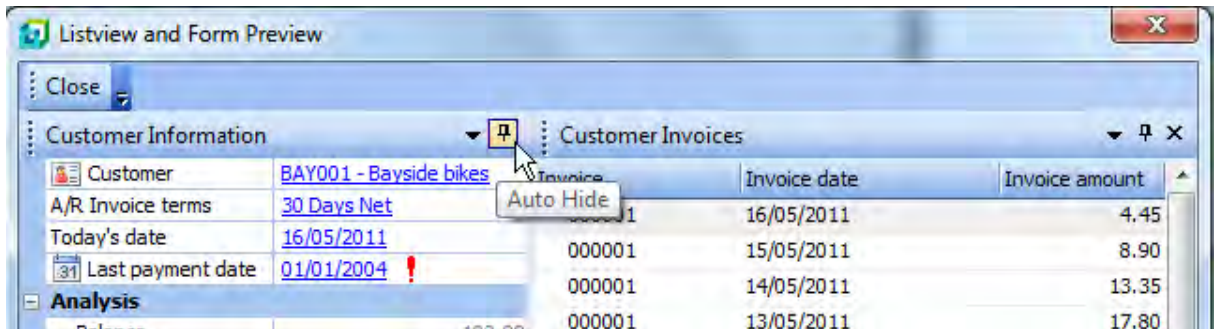
The *Reset the form* will remove any properties that have been assigned to fields on the form, remove any *Form Actions* that have been added to the form and remove any *Standard Fields* that have been

added to the form using the *Insert Standard Fields* option. *Custom Form Fields*, *Related Fields*, and *Scripted Fields* that have been added to the form are not removed.

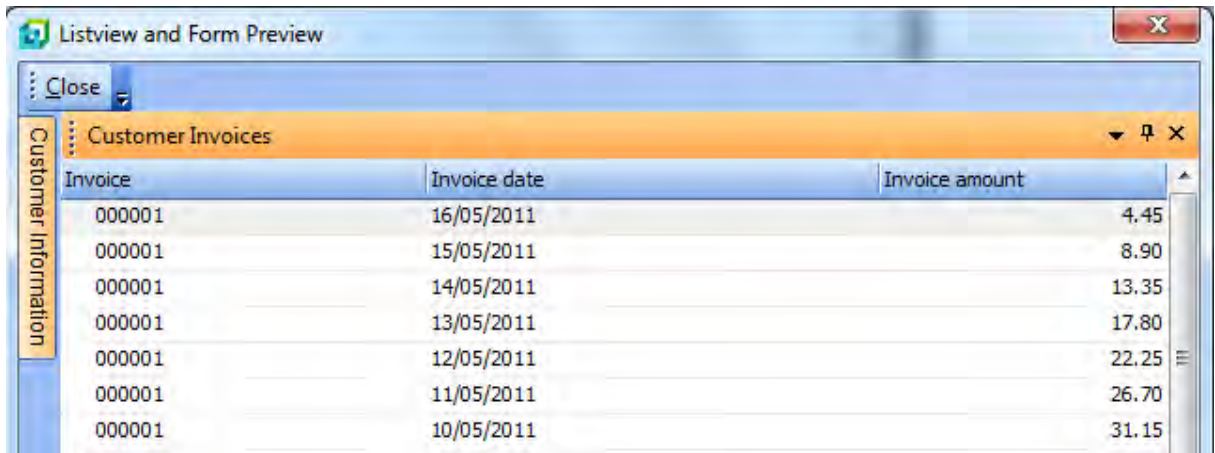
## Auto Hide (Reduce Form to a Tab)

The *Auto Hide* option allows you to reduce the form to the size of a tab and restore the tab back to being a form in its original position. This makes more screen real estate available if some forms are only used occasionally. If available, the *Auto Hide* option appears as a pin in the titlebar of a form.

**Figure 4:16** shows the *Auto Hide* option before the form is reduced to a tab.



**Figure 4-16:** The *Auto Hide* option



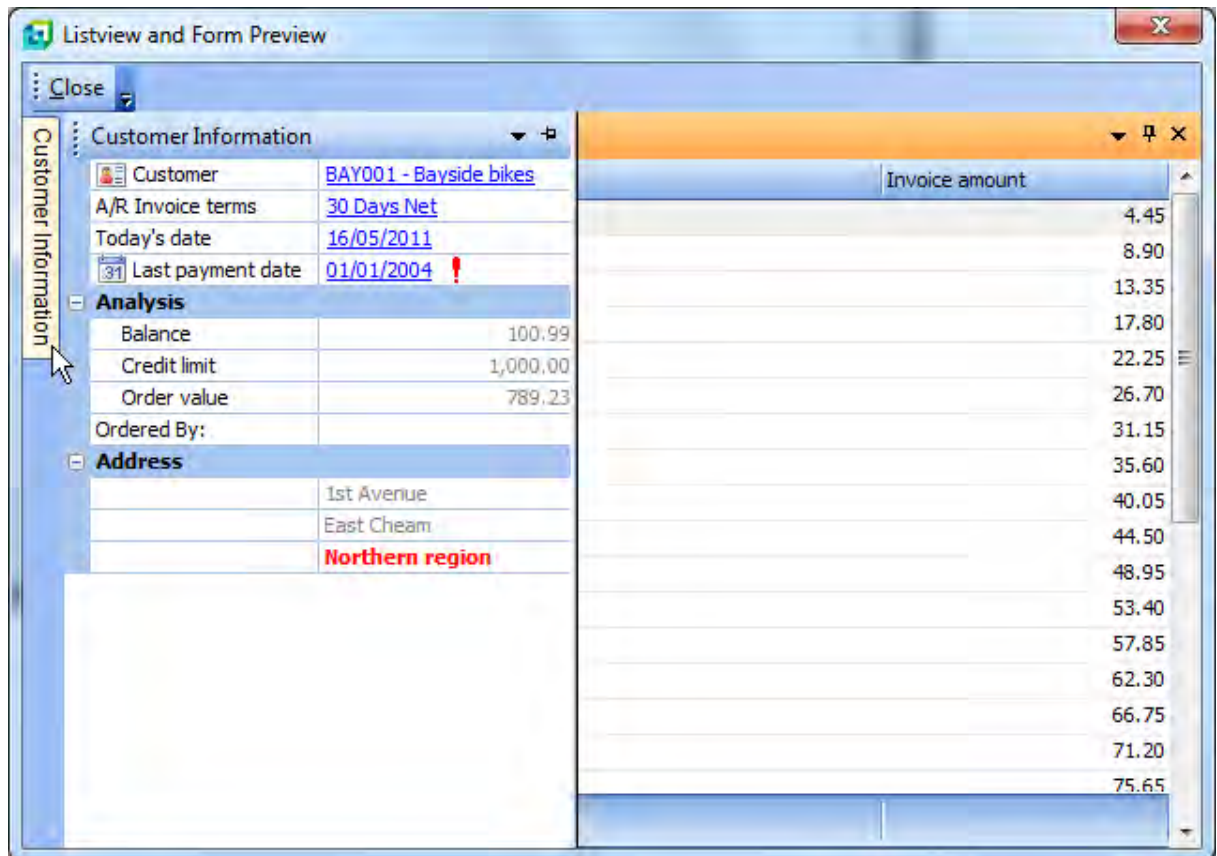
**Figure 4-17:** The *Customer Information* tab after the form has been reduced to a tab

When the *Auto Hide* option is clicked, the form is reduced to a tab around the outside of the program's window. The other forms, listviews, etc., will expand to use the space that has become available.

**Figure 4-17** shows the same *Listview and Form Preview* screen as appears in **Figure 4-16**, but after the *Customer Information* form has been reduced to a tab.

If you move the mouse pointer over this tab, the tab expands to show the contents of the form (see **Figure 4-18**).

If you select the *Auto Hide* option on the titlebar of the displayed form, the tab is converted back to a form. An attempt will be made to restore the form to its original position and size, however, this may not be possible if other forms have been added or moved since the form was reduced to a tab.



**Figure 4-18:** When the mouse pointer is moved over the tab, the tab is expanded to show the form

## Field Properties

The *Field Properties* option is available from the context-sensitive menu that appears when you right-click on a caption within a form. It is used to specify the properties for the field that was highlighted on the form when the *Field Properties* option was selected, and is only for this form. The *Properties* screen that is displayed when this option is selected consists of a form, which form contains options broken into six groups. These groups are *Appearance of Caption*, *Appearance of All Captions*, *Appearance of Data*, *Behaviour*, *Button*, and *Help Panel*.

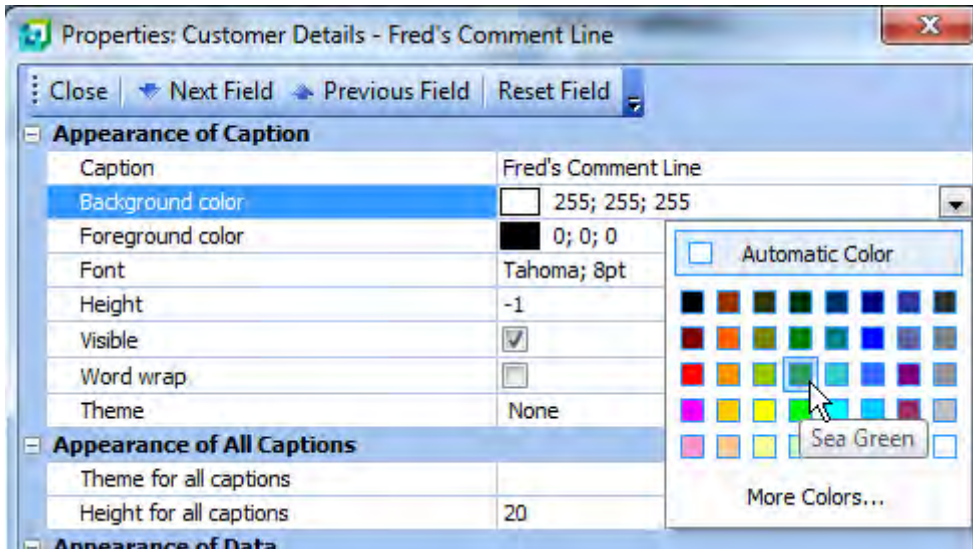
Being a form, the *Properties* form consists of fields, which are matched pairs of captions and values. If any of these values are changed, the field on the original form will change immediately. Providing that the *Properties* form does not obscure the original form, you can see in real time the effects of your changes in real time.

The *Appearance of Caption* group contains items that relate to the way that this caption is displayed on this specific form, such as the foreground color, background color and font. The first field is *Caption* and, by default, its value shows the current caption. This can be changed to an alphanumeric description of up to 40 characters. As mentioned previously, this change only affects this caption on the original form.

All the fields on the *Properties* form that allow you to specify the color (either Background or Foreground) work in a similar way, so will only be explained here once, and against the *Background color* option. The colors appear as three 8-bit values separated by semi-colons, in the ranges 0;0;0; (white) to 255;255;255; (black). The first number represents the amount of Red in the color (using a range from 0 to 255) the second number represents the amount of Green in the color, and the third number represents the amount of Blue in the color. You can change these numbers manually and if you tab off of the field, the sample (and field on the original form) will change to display the color that these numbers represent. Alongside these numbers is a dropdown list icon. If this is selected, a screen is displayed that contains some of the more common colors (a color chooser). If you allow your mouse pointer to hover over one of these blocks of color, a tooltip will display its name. **Figure 4-19** shows the screen containing the color chooser.

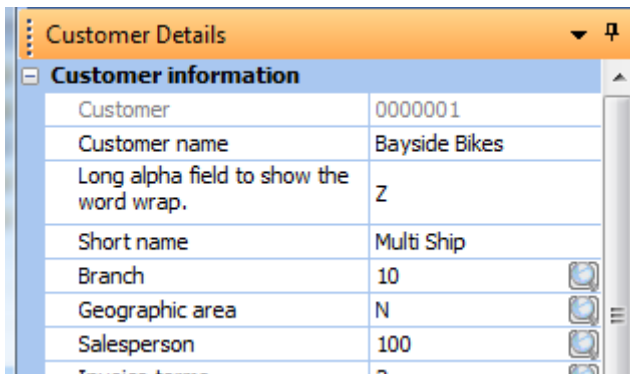
Beneath the color samples is the *More Colors* option. If this is selected, a hexagon containing more colors is displayed on the *Standard* tab and you can select from this, or use the *Custom* tab. If any of the colors available from the *More Color* option is chosen they will appear alongside the *More Colors* option in the color chooser.

Also under the *Appearance of Caption* group is the *Font* option that allows you to set the type and size of font to be used for the caption. If you increase the size of the font you may also need to use the *Height* option. The *Height* option is a slider bar that specifies the height of the area reserved for this caption in pixels. As the field may contain images, buttons, etc., the caption height should be set large enough to cater for this. To return the *Height* back to its default size, set it to -1.



**Figure 4-19:** The dropdown list containing the color chooser

The *Visible* option performs the same task as using the *Hide* option mentioned in the *Deleting Fields from Forms* section. When unchecked, it hides the field and adds it to the list against the *Show Captions* option, mentioned above. The *Word wrap* option is also used in conjunction with the *Height* option to reduce the width taken up by long captions. **Figure 4-20** shows the *Word wrap* option in use, along with the height being changed to 32.



**Figure 4-20:** Using the *Word wrap* option to reduce the width of the captions

The final option in the *Appearance of Caption* group is *Theme*. This option has a dropdown list that contains some XAML themes that can be applied to this caption. Each of these XAML themes relate

to a XAML markup file that contains placeholders. These placeholders are numbered %1%, %2%, %3%, etc., and are replaced by the values in the cell at run time. Unless VBScript code has been added to the listview, each cell will only contain one value so it will only use the first placeholder (%1%). If the XAML markup file requires more than one value (such as those showing charts and trendlines) there is no point in applying the markup code to this column, as it will not show a meaningful image. **Figure 4-21** shows the *Silver* theme applied to the *Customer name* caption. In this case the *Height* has also been adjusted.

The second group on the *Properties* screen is *Appearance of All Captions* which contains two options. The first option is *Theme for all captions* which enables you to select a theme from a dropdown list that will be applied to all captions on this form. When the *Properties* screen is closed it causes the *Theme* against the *Appearance of Caption* option for all the fields to be updated with this value and the *Theme for all captions* value to be cleared. If a theme already existed against one or more of the fields it will be replaced by the one that has just been selected.



**Figure 4-21:** Applying a *Theme* to the *Customer name* caption

You can change or remove the theme against individual fields by using the *Theme* against the *Appearance of Caption* option for a specific field and you can change/remove it globally using the *Theme* option against the *Appearance of All Captions* group.

The second option under the *Appearance of All Captions* group is *Height for all captions*, which defaults to 20. If you change this value, the value against the *Height* option under the *Appearance of Caption* group will be changed for all fields. Any fields that had previously had their *Height* set will have this value overwritten with the new value. Once this change has been made, you can change the height of individual fields by changing them manually and you can set all of them back to the default by setting the *Height for all captions* to -1.



The third group is called *Appearance of Data* which is used to change the way that the field's values are displayed. The *Background color*, *Foreground color*, and *Font* options work in the same way as those against the captions, just for the values.

The next option is *Alignment* and has a dropdown list containing the options *Default*, *Left*, *Center*, and *Right*. This is used to specify how the data is displayed within the available space. The value of a field selected on an entry form will appear in its default position while it is selected so that it can be edited. It will return to the specified position once it is no longer selected.

The *Theme* option under the *Appearance of Data* group contains a dropdown list of predefined color and font combinations. If one of these themes is selected, the *Background color*, *Foreground color*, and *Font* options within the *Appearance of Data* section will be changed to the values associated with this theme.

The fourth group is *Behavior* and consists of seven items. The first item is *Entry type*, which displays the type of data field and cannot be changed. The second is *Read only* and is only enabled on an entry form. Selecting this makes the field a read-only field so that operators cannot change its value. The third option is *Password mask*, and this replaces each character that is entered/displayed with an asterisk, so that the individual characters and numbers of the value cannot be seen.

The fourth option is *Upper-case conversion* which is only for fields on entry forms. It automatically converts any entered alpha characters to be uppercase, whether they were typed in uppercase or not. If this option is set against a field after data has already been captured, the data will still be stored as it was originally entered. However, if the operator tabs over this field, any existing value will automatically be converted to uppercase. When moving to the next master record, the operator will be prompted to save the record as this value has changed. For example, if a field in the *Stock Code Maintenance* program had its *Upper-case conversion* option checked after some stock codes had already been added, when you called up one of these stock codes the value would be displayed as it was entered. If the operator tabbed over this field, the value would be changed to be in uppercase. When moving to another stock code, or closing the program, the operator would be prompted whether the changes must be saved. If they are not saved, the value will remain as it was.

The fifth option is *Multiline count* which allows you to specify how many lines are allocated to data for this field. The value can be between 1 and 19 lines. This can help reduce the width of the form if some fields within it contain a lot a data. **Figure 4-22** shows the *Address line 1* field of the *Contact Details* form. This field has been configured to have a *Multiline count* value of 3, so has allocated 3 lines. Because of the width of the form, the data has been split over two of these three available lines. This does not affect the way that the data is stored, merely how it is displayed for this form.

Contact Details	
<b>Sold to address</b>	
Address line 1	P O Box 8
Address line 2	Bayside North
Address line 3	Seattle
Address line 4	WA
Address line 5	USA
Postal/zip code	98111
<b>Ship to address</b>	
Address line 1	Number 93, James Court, 3 Beach Road
Address line 2	Bayside North
Address line 3	Seattle
Address line 4	WA
Address line 5	USA
Postal/zip code	98101
Email	Accounts@BaysideRikes.com

4-22: The *Address line 1* field is set to a *Multiline count* of 3

The sixth option is *Maximum length* which is only available for alphanumeric fields on entry forms. It allows you to specify the maximum length of data that can be entered for this field. The default number is the standard length of this field and can be reduced but not increased. The validation is done as the data is input, so (if you already have data in the field that is longer than the new maximum length) it will continue to be valid until you attempt to change this data.

The last option of the *Behavior* group is *Input mask*. It allows you to define a template of what data can be entered for this field, and how it must be displayed. This is only for this form; if you wish to set this template for all forms, use the *Input mask* option under *Field Properties for All Forms*.

The template is built up using a combination of characters and underscores. An underscore represents a position and the character immediately after it represents a range of numbers and/or letters, and their case. Any characters in the template that do not immediately follow an underscore will appear as themselves. This is probably best explained with a few examples, which appear below.

The following is a list of the characters and their special meanings.

- 0 – Numeric (0-9)
- 9 – Numeric (0-9) or space
- # – Numeric (0-9) or space or + or -
- L – Alpha (a-Z)
- ? – Alpha (a-Z) or space
- A – Alphanumeric (0-9 and a-Z)
- a – Alphanumeric (0-9 and a-Z) or space
- & – All printable characters
- H – Hex character (0-9 and A-F)
- X – Hex character (0-9 and A-F) or space
- > – Forces characters to uppercase (A-Z)
- < – Forces characters to lowercase (a-z)

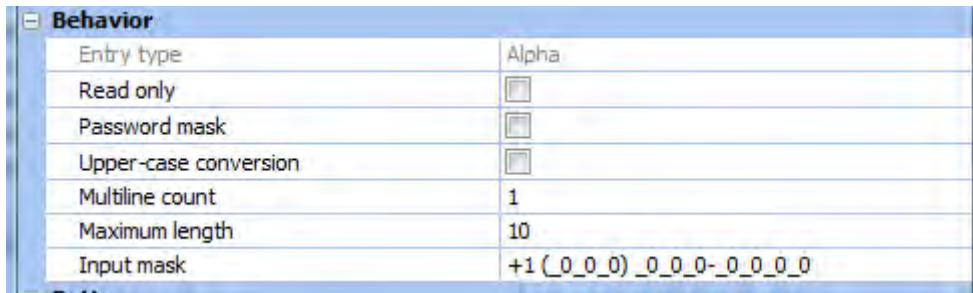
**Figure 4-23** shows the *General Details* form of the *Customer Maintenance* program. On it is the field *User defined 1* which allows the entry of up to 10 alphanumeric characters. If you needed to add a telephone number for the contact's supervisor in this field, you could leave the field as it is and the operators would enter the number free format. Unfortunately, some operators would include the dial code and others wouldn't. This would mean that if you performed a search on the dial code to find all customers who have a supervisor in a certain area, you wouldn't always get the results that you were expecting.

General Details	
<b>General information</b>	
Back orders allowed	<input checked="" type="radio"/> Allowed <input type="radio"/> Not allowed <input type="radio"/> Not required
Stock code interchange required	<input checked="" type="checkbox"/>
Customer/stock code cross-ref. required	<input checked="" type="checkbox"/>
Customer purchase order number mandatory	<input checked="" type="checkbox"/>
User defined 1	
User defined 2	3.00
Auto price code selection	A

**Figure 4-23:** The *User defined 1* field on the *General Details* form

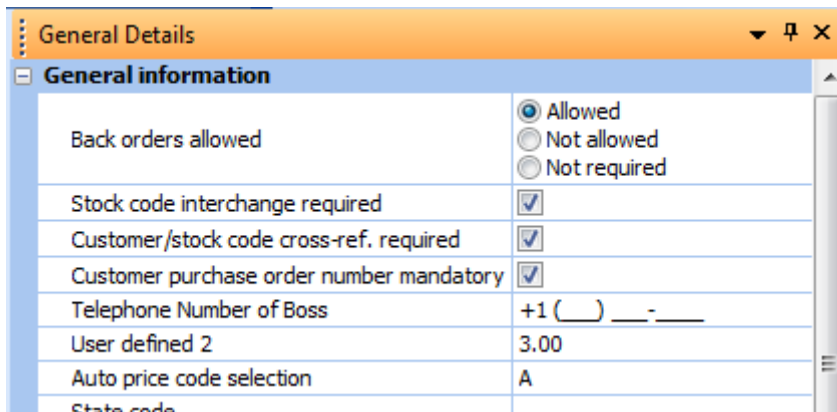
To force the telephone number to be entered in the correct format you can create an input mask. In this case you only allow the entry of numbers without spaces, so you would use underscores followed by zeros (to denote 0-9 being the only characters allowed). **Figure 4-24** shows the input mask *+1 (\_0\_0\_0)\_0\_0\_0-0\_0\_0\_0*. The *+1* at the beginning of the template will be displayed as it is, as these characters do not immediately follow an underscore. It will also not be stored in the field. The

parentheses will appear as they are around the dial code, and the hyphen will appear between the third and fourth digit of the telephone number, for the same reason, and will also not be stored in the field.



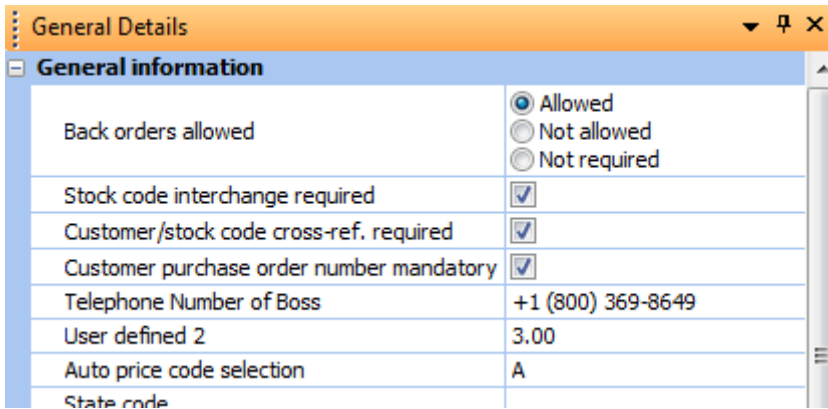
**Figure 4-24:** The Input mask template

At the same time as entering the *Input mask* in the *Field Properties*, the *Caption* was changed from *User defined 1* to *Telephone Number of Boss*. When the *Field Properties* screen was closed the new caption was displayed and the *Input mask* made it obvious how to enter this telephone number (see **Figure 4-25**).



**Figure 4-25:** The input mask created by the template, before data capture

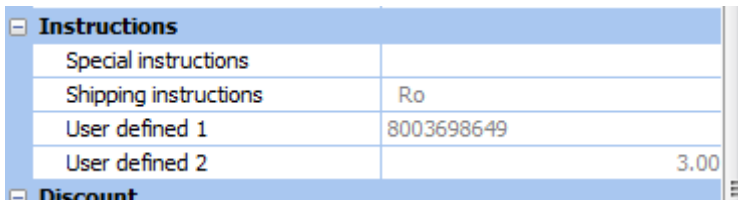
As focus is set on this field, the cursor will be positioned on the first underscore - the one that appears immediately after the first parenthesis. As the operator types in the third character of the dial code, the cursor jumps past the second parenthesis and positions itself on the next underscore. After the third digit of the telephone number has been entered, the cursor jumps past the hyphen. Once the number has been entered, it will appear as in **Figure 4-26**.



General information	
Back orders allowed	<input checked="" type="radio"/> Allowed <input type="radio"/> Not allowed <input type="radio"/> Not required
Stock code interchange required	<input checked="" type="checkbox"/>
Customer/stock code cross-ref. required	<input checked="" type="checkbox"/>
Customer purchase order number mandatory	<input checked="" type="checkbox"/>
Telephone Number of Boss	+1 (800) 369-8649
User defined 2	3.00
Auto price code selection	A
State code	

**Figure 4-26:** The telephone number after it had been entered

As the *Input mask* and *Caption* were only configured against *Field Properties* these changes will only appear against this form. If you call up another program that displays this field, you will see the value in its default way. **Figure 4-27** shows a section of the *Additional Fields* form of the *Customer Query*. As the *Input mask* and *Caption* have not been changed for this form, the caption is *User defined 1* and the telephone number appears as *8003698649*. A similar change could be made to the *Caption* and *Input mask* under the *Field Properties for All Forms* option and this change would appear wherever the *User defined 1* field appeared. The *Field Properties for All Forms* option is covered later in this chapter.



Instructions	
Special instructions	
Shipping instructions	Ro
User defined 1	8003698649
User defined 2	3.00

**Figure 4-27:** *User defined 1* field as displayed on the *Additional Fields* form of the *Customer Query*

Another example of where the *Input Mask* could be used is with the *Company tax registration number* field. In this example the *Input Mask* is *\_>\_>\_>/\_0\_0\_0\_0/\_0\_0\_0\_-\_A\_A\_A* which means it consists of the following:

- three uppercase letters
- a slash
- four numbers
- a slash
- three numbers
- a hyphen
- three upper- or lowercase letters or numbers

The slashes and hyphen would not be saved against the field. By adding this to the *Input Mask* of the *Field Properties for All Forms* it would be represented this way on all forms (see **Figure 4-28**).

Tax exemption selection	Non taxable	▼
Tax exemption number		
Company tax registration number	AAA/6632/445-Qa3	
User defined 1		
User defined 2	0.00	

[-] Invoice discounts

**Figure 4-28:** The *Company tax registration number* entered using an *Input Mask*

The fifth group within the *Properties* screen is *Button* which this enables you to add a button to the field without using VBScript. However, as VBScript is required to specify what should happen when the button is clicked, it will only be covered superficially here.

⋮ General Details ▼ ⌵ ✕

Stock code interchange required	<input checked="" type="checkbox"/>
Customer/stock code cross-ref. required	<input checked="" type="checkbox"/>
Customer purchase order number mandatory	<input checked="" type="checkbox"/>
Auto price code selection	A
State code	
Delivery route code	North <span style="float: right;">🌐 ☰</span>
Delivery route sequence	10
Tax exemption selection	Non taxable ▼
Tax exemption number	
Company tax registration number	
User defined 1	
User defined 2	3.00

[-] Invoice discounts

Based on order value/quantity	<input type="checkbox"/>
Invoice discount code	<span style="float: right;">🌐 ☰</span>

[-] Invoice line discounts

Based on product class sold	<input type="checkbox"/>
-----------------------------	--------------------------

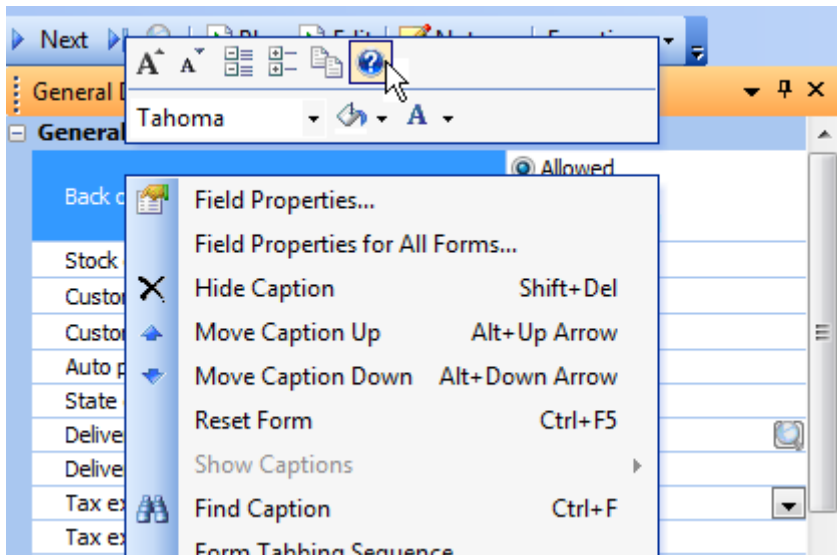
**User defined 1**  
 This is my help. I created it so that other could benefit from it.

**Figure 4-29:** The *Help text* for the field *User defined 1* popping up at the bottom of the *General Details* form as the field is selected

The *Caption* specifies the text that should appear on the button and *Tooltip* specifies what should be displayed if the mouse pointer hovers over the button. It is also possible to select an *Icon* to be displayed on the button. This is selected from SYSPRO's standard list of icons and, if selected, the icon will be used instead of the *Caption* text.

The final group within the *Properties* screen is *Help Panel*. This enables you to supply your own text that may clarify either the meaning of a field, or how it should be used. When it is displayed, the help text appears in a block at the bottom of the current form. Within this group are two options, *Help text*, and the *Show help automatically* checkbox. The *Help text* option is where the text is added/maintained. The *Show help automatically* option specifies whether the help should pop up as you set focus on this field. **Figure 4-29** shows the *Help text* for the *User defined 1* field popping up at the bottom of the *General Details* form as the operator tabs onto this field.

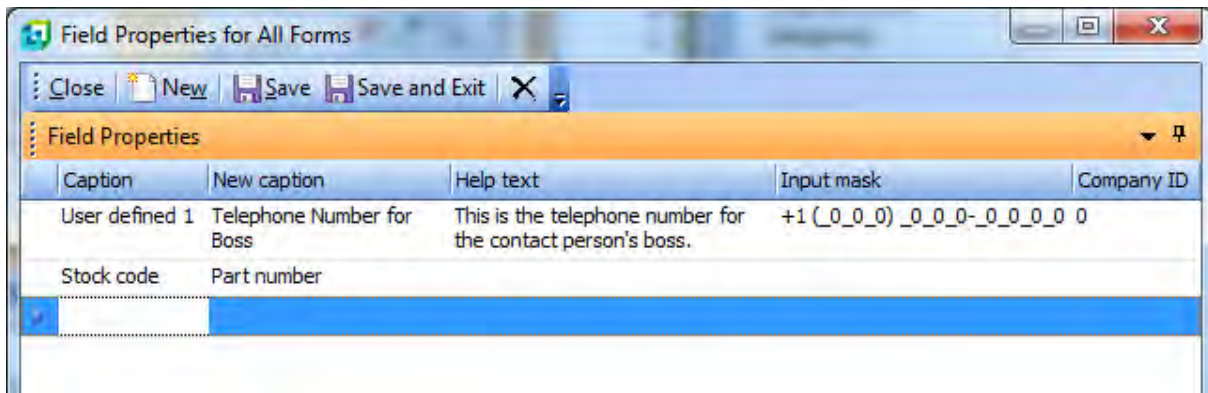
You can toggle the help text on/off using the question mark icon that appears on the mini context-sensitive menu when you right-click on any caption on the form (see **Figure 4-30**). Once set on, it displays the help text section for all fields, regardless of whether they have help text against them. If it is set off, it will only display help text for those fields that have the option *Show help automatically* checked.



**Figure 4-30:** Toggling the help text on/off for this form

## Field Properties for All Forms

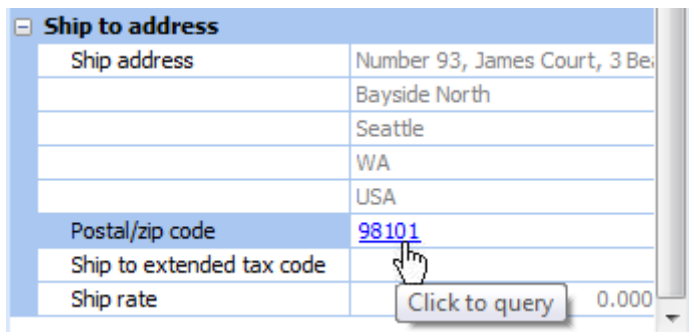
The *Field Properties for All Forms* option is available from the context-sensitive menu that appears when you right-click on a caption within a form. It is used to specify the properties for this field on all the forms on which it appears. It enables you to globally change the *Caption*, set *Help text*, and set an *Input mask*. You can optionally specify that this must only occur for one company (see **Figure 4-31**).



**Figure 4-31:** The *Field Properties for All Forms* option

## Hyperlinks

The *Hyperlinks* option is available from the context-sensitive menu that appears when you right-click on a display form, but is not available for an entry form. It is used to hyperlink the value of a field so that you can call a SYSPRO program, or another application (that sits on either the client or the SYSPRO server). **Figure 4-32** shows the *Postal/zip code* on the *Contact Details* form of the *Customer Query*. The value has been hyperlinked and, if selected, has been configured to call an application to validate the zip code.



**Figure 4-32:** A *Hyperlink* added to the *Postal/zip code* field in *Customer Query*



When configuring a *Hyperlink*, the caption of the field on which you resided when you called up the *Customize Hyperlink* program is prepopulated in the *Caption to match* field but this can be changed. The entered string is used to pattern match against the field's caption. If the caption matches, the value is hyperlinked. This is a global setting, so if you exit the *Customer Query* and call up another program that has a caption *Postal/zip code* on a display form, it is hyperlinked in the same way.

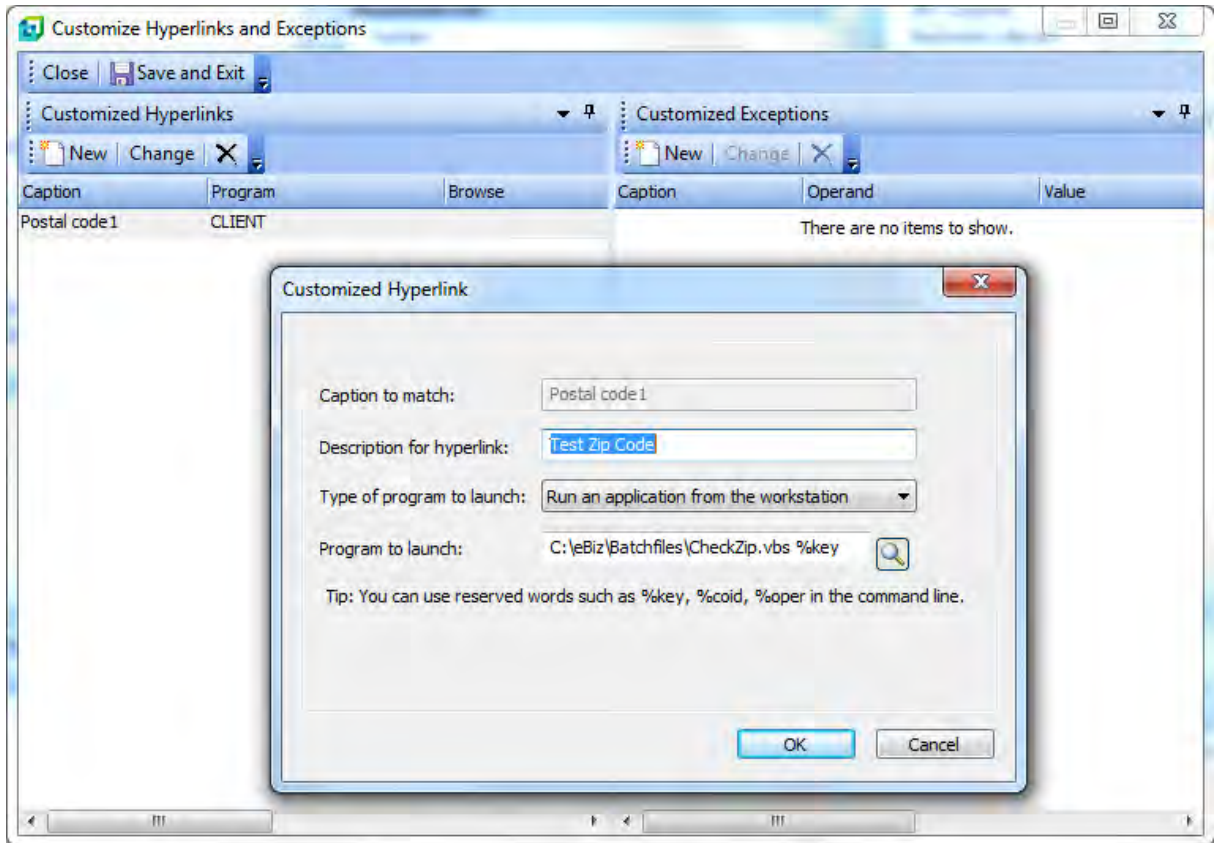
You can enter a description for the hyperlink to make it easier to maintain at a later date. The *Type of program to launch* option has a dropdown list against it where you can select from *Run a SYSPRO program*, *Run an application from the workstation*, or *Run an application from the server*. If you select the *Run a SYSPRO program* option you can either type in the program name or use the supplied browse to locate the program by its description. If you supply a value against the *Program parameters* option, this will be passed through to the SYSPRO program that is called.

If you do not provide anything against the *Program parameters*, the value for this field (which has been hyperlinked) will be passed through as a parameter when the program is called. For example, if the hyperlink has been configured to call the *Inventory Query (INVPEN)* and no *Program parameters* have been set, the hyperlinked value will be passed through as if it were a stock code to this program.

If the *Browse-style program* checkbox is checked then, when the program is called and the hyperlinked value (or value against the *Program parameters* option) is passed through, the browse starts from this value. So if the *Stock Code Browse (INVBST)* is the SYSPRO program, the *Browse-style program* checkbox is checked and the hyperlinked value is *B100*, then the stock code browse would be called and the first stock code in the browse would be *B100*.

If either the *Run application from the workstation* or *Run application from the server* option is selected, then the *Program to launch* option is available. You can either type in the program name and path, or use the browse to locate the program. Parameters can be passed to this application using the *%key*, *%coid* and *%oper* variables on this command line. These will be replaced at run time with the value of the current key, the company ID and the operator code. **Figure 4-33** shows the configuration of a hyperlink to run an application from the workstation and to pass the current hyperlinked value to this application using the *%key* variable.

Hyperlinks that have been created against a scripted field (and the scripted field currently has no data to display) will display the hyperlink [Show](#).



**Figure 4-33:** Creating a hyperlink to call an application on the workstation, passing through the field value

Some fields will display their values in red when specific exception criteria are met. If one of these fields has been hyperlinked then, when this exception occurs a red exclamation mark appears alongside the hyperlink. **Figure 4-34** shows the *Customer Information* form of the *Customer Query*. The value of the *Over limit* field is shown in red when the customer is over their credit limit. As this field has been hyperlinked, a red exclamation mark is placed alongside the hyperlinked value when the customer is over their limit.

Customer Information	
<b>Customer details</b>	
Customer	<a href="#">0000002</a>
Name	Bikes and Blades - North
Currency	<a href="#">\$ - Local Currency</a>
On hold	
Credit status	
Credit status code	0
Master/subaccount	This is a master account
Credit limit	0
AR invoice terms	<a href="#">1 - 30 Days - 2.5%</a>
Over limit	<a href="#">1,215,181.72</a> !
Credit checking	Company method (none)
Order value	136,113.00

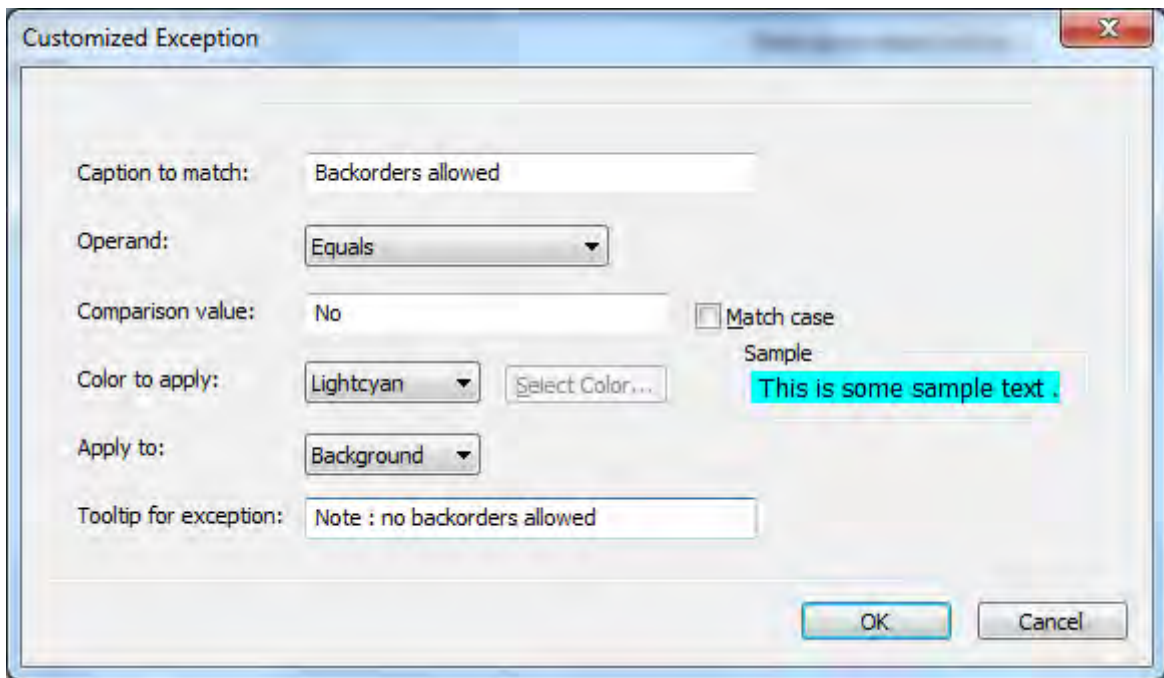
**Figure 4-34:** A field that has been hyperlinked that is showing an exception

## Exceptions

*Exceptions* are a simplified means of highlighting a field when it matches a set condition and requires no VBScripting or other coding. Like hyperlinks, *Exceptions* are global, matched using the caption and only available on display forms. When the condition is met the color of the foreground or background is changed to the specified color.

The comparison is performed on the value of the field. The available options are: *Equals*, *Greater than*, *Greater than or equal to*, *Less than*, *Less than or equal to*, *Not equal to*, and *Starts with*. The value of the field is compared to whatever has been entered against the *Comparison value* field. The *Match case* checkbox allows you to stipulate that the comparison is case-sensitive for alpha values. Once the *Color to apply* has been chosen, you specify if this must be applied to the foreground or background color and you can also supply a tooltip that is available when the comparison is true.

**Figure 4-35** shows the configuring of an *Exception* to change the background color of the *Backorders allowed* field to light cyan and make a tooltip available if the field's value contains *No*.



**Figure 4-35:** Configuring an *Exception* to change the background color of the *Backorders allowed* field if it contains the value *No*

## Form Actions

A *Form Action* is an extremely powerful user-definable hyperlink that sits on a section at the bottom of a form. The hyperlink can be configured to call a SYSPRO program and pass it parameters, or to fire a VBScript event. You can have multiple form actions defined per form and they can be any combination of these types.

A form action is added using the *Insert Form Action* option from the context-sensitive menu that appears when you right-click on a form. When this option is selected you can add a form action that will use VBScript, a form action that will call a SYSPRO program (and optionally pass it a parameter) or add a form action template.

Although beyond the scope of this document, the VBScript event can call SYSPRO business objects to post and retrieve data. **Figure 4-36** shows the *CheckAvailabilityInNY* form action that has been configured to use VBScript to call a business object and return the available stock value for the New York warehouse.

Order Line	
Warehouse	E
Stock code	A 101
Description	15 Speed Mountain Bike Girls
Order uom	EA
Order quantity	2.000
Ship quantity	2.000
Back order quantity	0.000
Price code override	<input type="checkbox"/>
Current Supplier Qty	0.00
Price code	A
Price override	<input type="checkbox"/>
ABC	
Price	560.00000

[CheckAvailabilityInNY](#)

**Figure 4-36:** The *CheckAvailabilityInNY* form action configured against the *Stocked Line* form in *Sales Order Entry* to check that availability of stock in a specific warehouse

**Figure 4-37** shows the output that is produced when the *CheckAvailabilityInNY* form action is selected, which includes the available quantity.

New York

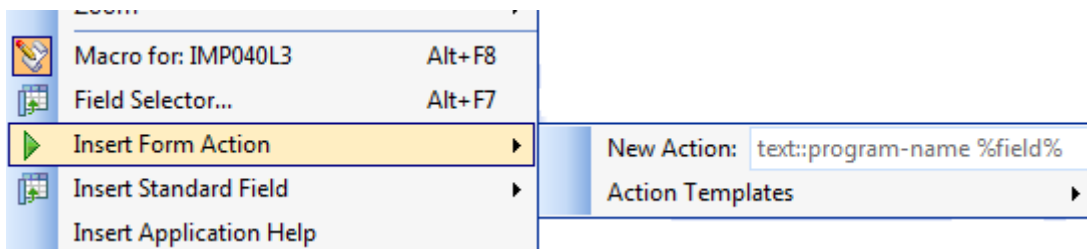
The available quantity in New York is : 14125.000

OK

**Figure 4-37:** The result of clicking on the *CheckAvailabilityInNY* form action

When adding a form action the sample string *text::program-name %field%* appears against the *New Action:* option. This shows the format for creating a form action to call a SYSPRO program and pass

through a parameter (see **Figure 4-38**). If you click on the section holding this sample, it will be cleared so that you can enter your form action.



**Figure 4-38:** Using the *Insert Form Action* option

If you just type in a name for your form action (as was done in the case of *CheckAvailabilityInNY*) a wizard will take you to the *VBScript Editor* where an event will have been created with the same name as your form action, but preceded with *On*. For example, when the *CheckAvailabilityInNY* form action mentioned above was added, the event that was created was called *OnCheckAvailabilityInNY*.

To call a SYSPRO program using a form action you need to provide a name for the form action followed by two colons followed by the program name. If you want to provide a parameter you need to add a space character followed by the parameter. If this parameter is a value you just add the value to the end. If the parameter is held in a variable, the variable name must be surrounded by percentage signs. The variable can be the caption of a field on this form, or any other form that appears in this program.

When the form action is used, the SYSPRO program will be called and the parameter passed through to this program. When calling the *Customer Query* and providing a parameter, the parameter will be entered against the *Customer* prompt on the toolbar, and the equivalent of the *Tab* key pressed. If the supplied parameter is valid, the customer details will be displayed and, if not, a message to this affect will appear.

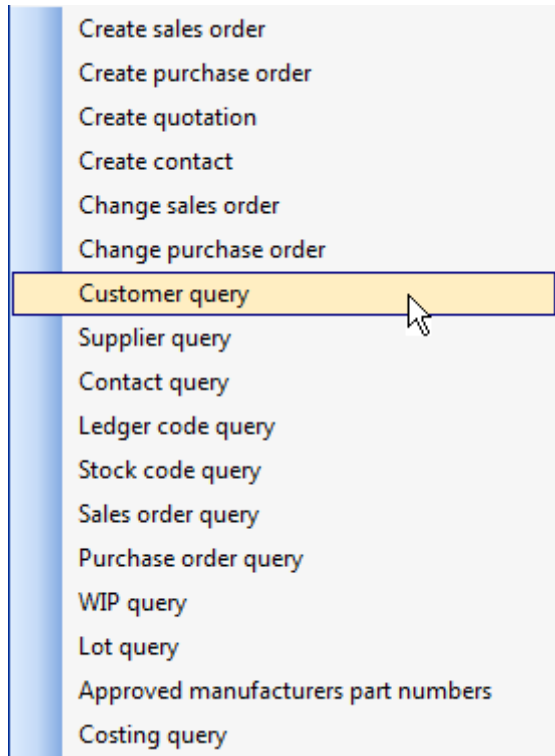
If you want to add a form action to the *Order Header* form of the *Sales Order Entry* program to call up the *Customer Query* (**ARSPEN**) and pass it the currently selected customer account code, you would provide the following as your *Form Action*:

```
My Customer Query::ARSPEN %customer%
```

When you press *Enter* to add this form action it will add the hyperlinked form action name to the bottom of your form, in this case [My Customer Query](#). When this hyperlink is clicked it will look for a caption on the current form that has the same name. If it finds one it will use the current value of this field as the parameter. If it does not find a caption that matches this variable name, it will look through the captions of the other forms for this program to locate a match. If it finds one it will use this value as

the parameter. If it does not find a caption that matches the variable name, the parameter will be empty.

The *Action Templates* option under *Insert Form Action* displays a list of predefined form actions. When selected, the form action is added for you with the program name and matching variable (see **Figure 4-39**).



**Figure 4-39:** Using the *Action Templates* option to add a predefined form action

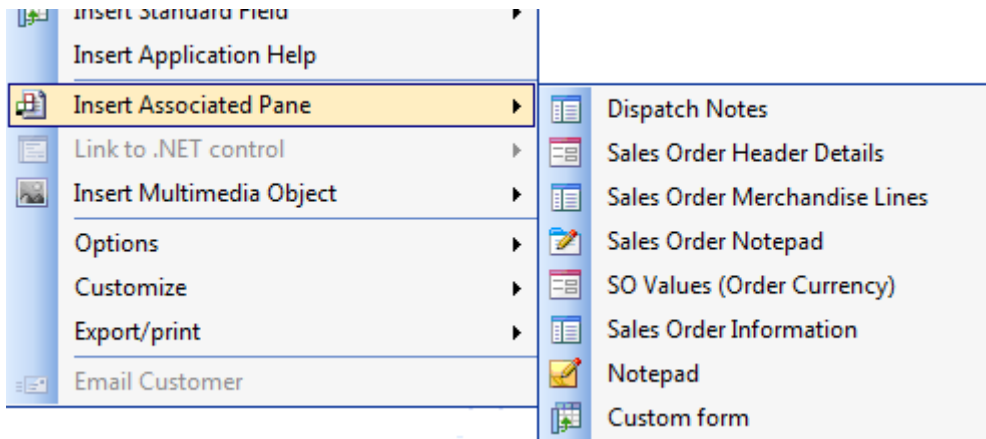
## Associated Panes

An *Associated Pane* is a pre-written customized pane that is specifically associated with a SYSPRO key field (i.e. a customized pane template that has been written for a specific SYSPRO key field such as *Stock Code*, *Customer*, *Requisition*, etc.). The associated pane can be a listview, a form, a graph, or any other format that is supported for a customized pane. An associated pane differs from a customized pane in that when the value of the field with which it is associated changes, the associated pane automatically changes to match.

An associated pane is added to a SYSPRO program by right-clicking on the caption of a key field and selecting *Insert Associated Pane* from the displayed menu. The list of available associated panes for this key field will be displayed, together with an icon to show if this is a listview, form, graph, etc. (see **Figure 4-40**).

As the associated pane is added to the program, it should automatically populate with the data for this key field. From this point onwards, whenever the value of this key field changes, the associated pane should be refreshed with the data relating to the new value.

If other data changes, but the value of the key field to which this associated pane is linked does not change, the associated pane will not refresh. For example, the *Sales Order Query* includes many key fields such as the *Customer* and *Stock Code*. If an associated pane such as *Customer Invoices* is inserted for the *Customer* key field, when another sales order number is selected the associated pane will only be refreshed with data if the *Customer* field changes. So if the second sales order is for the same customer as the first, then the associated pane is not refreshed.



**Figure 4-40:** The available associated panes for the *Sales Order* key field

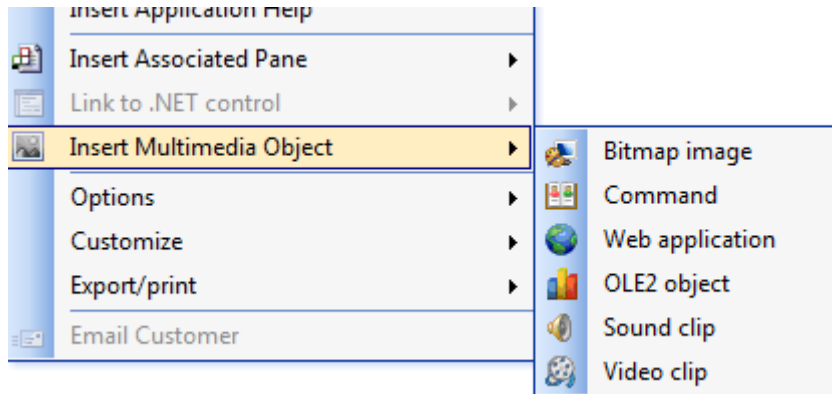
As an associated pane is really just a template for a customized pane, it is possible to change how it works and/or what it displays. The associated panes that are listviews all call business objects to get their data. These business objects can return a large amount of data, so the listviews have been limited to display just the most relevant columns. Where there may be many relevant columns they have typically been limited to display nine columns and the other fields are available from the field chooser for this pane.

Where an associated pane has been added to a program, when you display the list of available associated panes for the key field, the associated pane's name will appear italicised. If an associated pane is deleted its name will appear normally again in this list.



## Insert Multimedia Object

Most key fields such as *Stock Code*, *Customer*, *Supplier*, *Job*, etc., can have multimedia objects associated with them. These multimedia objects can be images, sound clips, movies and other types of files. When you right-click on a key field on any display or entry form you can select *Insert Multimedia Object* from the context-sensitive menu that is displayed. **Figure 4-41** shows the list of available multimedia object types.




**Figure 4-41:** The available multimedia object types

When one of these object types is selected, a new field is added above the key field to hold the multimedia object. For an image multimedia object, the image is displayed if there is one for this item, otherwise a blank placeholder is displayed. For other multimedia objects, such as video clips, where it is not appropriate to try and display the object, a placeholder is displayed. If this placeholder is double-clicked the relevant object is displayed/played.

It is possible to have more than one multimedia object type associated with a key field. **Figure 4-42** shows the *Stocked Line* form of *Sales Order Entry* which has two multimedia objects associated with the *Stock code*. The image is displayed, and if the placeholder for the video clip is double-clicked, a movie will play.

Multimedia objects are removed from a form in the same way as fields, using the *Hide Caption* option. The choice is then available to *Hide* or *Remove* it. If the *Hide* option is chosen, the multimedia object will be available via the *Show Captions* option.

Stocked Line	
Warehouse	E
Stock code Bitmap image	 (Bitmap)
Stock code Video clip	<input type="checkbox"/> None
Stock code	A101
Description	15 Speed Mountain Bike Girls
Order uom	EA
Order quantity	0.000
Ship quantity	0.000
Back order quantity	0.000
Price code override	<input type="checkbox"/>
Current Supplier Qty	0.00
Price code	A

**Figure 4-42:** Two multimedia object types associated with the *Stock code* field on the *Stocked Line* form in *Sales Order Entry*

## Insert Application Help

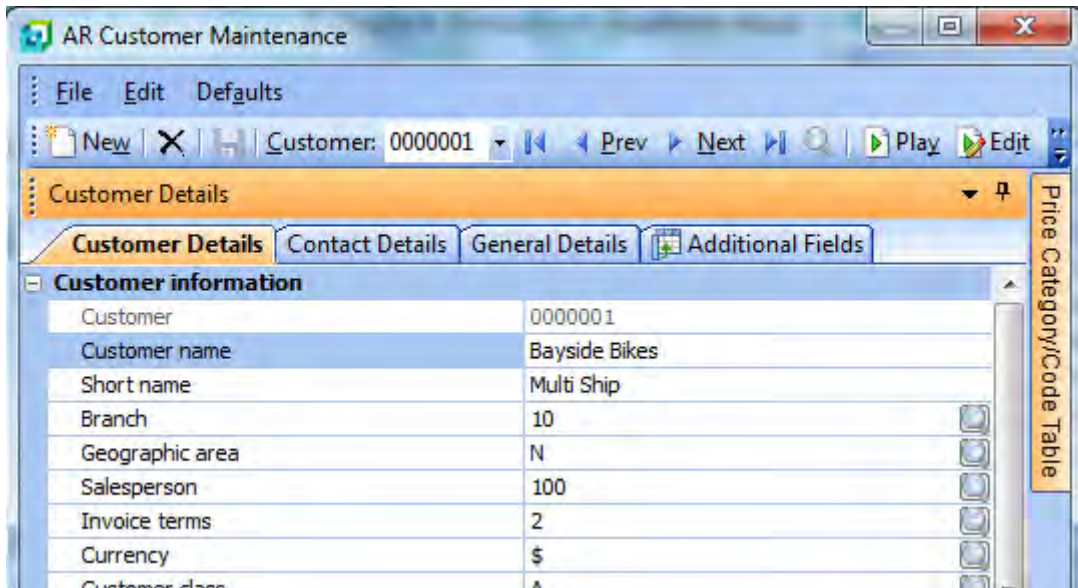
The *Insert Application Help* option is available from the context-sensitive menu that appears when you right-click on any caption on a form. When selected, it will add a new form and populate it with the help that would be displayed if you pressed the *F1* key.

## Form Tabbing Sequence

The *Form Tabbing Sequence* allows you to define, per program, the sequence that entry forms are accessed when you tab off the last field on a form. By default, tabbing off the last field on a form will position the cursor on the first field of the same form.

This option is particularly useful for master file take-on programs where you have modified the layout because of a lack of space. **Figure 4-43** shows the *AR Customer Maintenance* program after its layout has been modified to reduce the space requirements. Four of the forms have been tabbed and a fifth has been minimized to a tab at the side of the screen.

Without using the *Form Tabbing Sequence* option it would be very difficult to negotiate these tabs using only the keyboard. However, using this option you can specify the sequence that the tabs are accessed and even exclude some tabs.



**Figure 4-43:** Modified layout of *AR Customer Maintenance* to reduce screen real estate requirements

**Figure 4-44** shows the *Tabbing Sequence for Forms* option. All the entry forms for this program appear in this list. You drag the form names up and down until they are in the correct sequence. You then check the items in the list that you want to be able to access this way.

In this example, when you tab off the last field of the *Customer Details* form the *Contact Details* form will be brought to the front and the cursor will be placed on the first field of this form. When you tab off the last field of the *Contact Details* form, the *General Details* form will be brought to the front and the cursor will be placed on the first field of the form. The next form in the sequence (*Price Category/Code Table*) has been minimized to a tab at the side of the screen. When you tab off the last field of the *General Details* form, the *Price Category/Code Table* form is expanded and the cursor placed on the first field of this form (see **Figure 4-45**).

When you tab off the last field of the *Price Category/Code Table* this form is minimized back to a tab. As the *Additional Fields* form has not been selected in the *Tabbing Sequence for Forms* list, the *Customer Details* form is brought to the front and the cursor placed on the first field of this form.

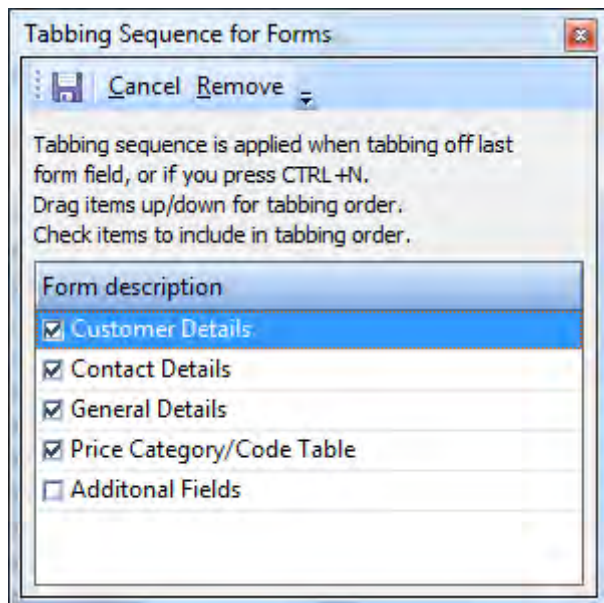


Figure 4-44: Configuring the tabbing sequence

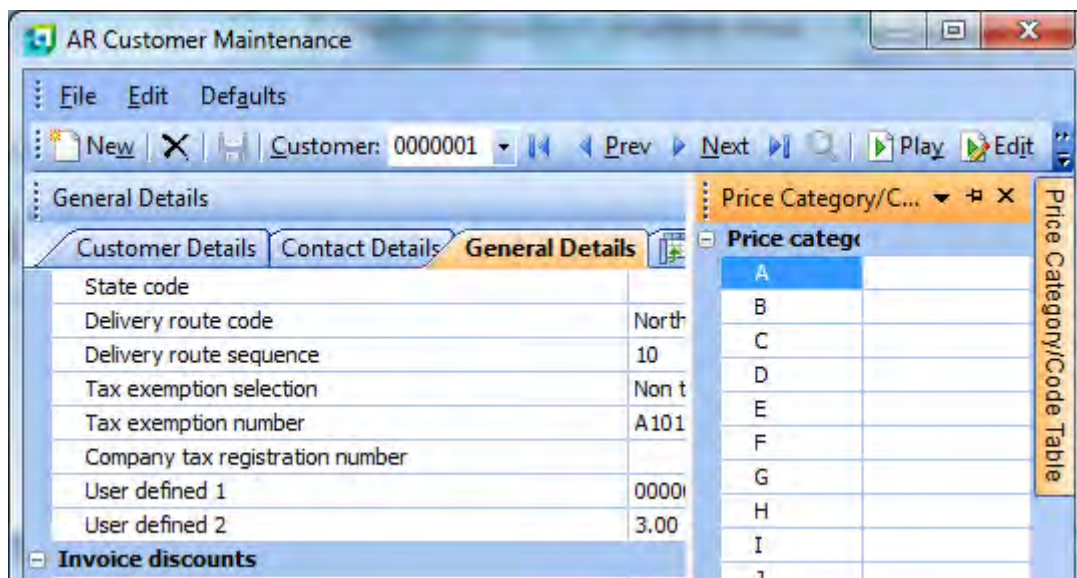
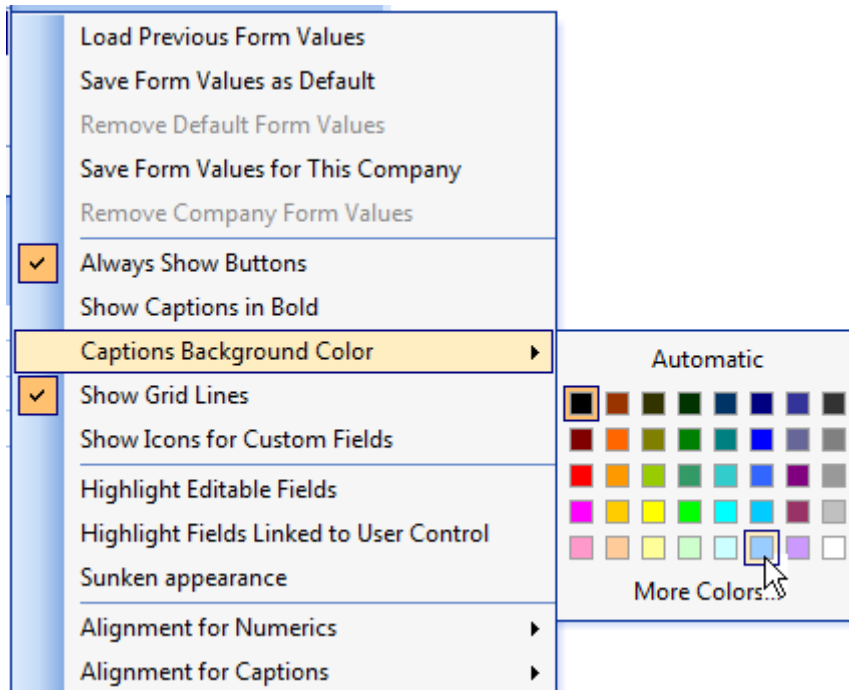


Figure 4-45: The *Price Category/Code Table* expanded and the cursor placed on the first field

## Options

The *Options* section of the context-sensitive menu is divided into four main sections. The first section covers the way that default settings for forms are saved/used. The second, third and fourth sections cover how the forms appear.

There are five options within the first section relating to defaults. This section only appears for entry forms and only when appropriate to be able to define defaults. A typical place to use these options is where there are selection criteria, such as in purge programs, or when printing documents. The examples given are all from the *Sales Order Batch Printing program (IMPO41)*. The *Save Form Values as Default* option will save the current options to be the default for this operator each time the operator calls up the program. If the *Sequence* radio button is changed from the default *Sales order* to *Alternate key* and this option selected, the next time that this operator calls up this program the *Sequence* caption will have the *Alternate key* radio button selected. Other operators will still have *Sales order* as their default *Sequence*.



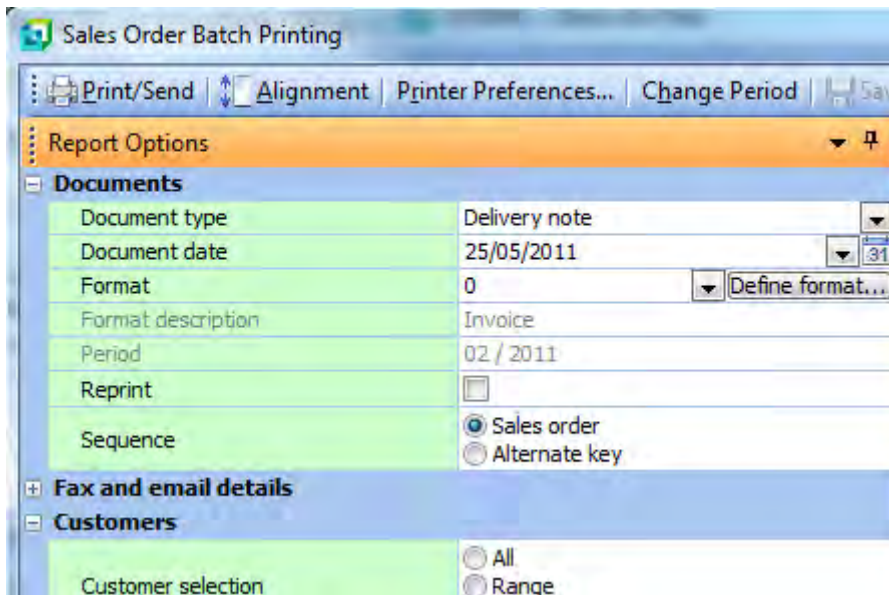
**Figure 4-46:** Selecting the background color for the caption

The *Remove Default Form Values* option removes the defaults set for this operator for this form. The next time the operator calls up this program, the form will use the original defaults.

The *Load Previous Form Values* option can be toggled on/off. If you toggle this on and exit the program, when you call it up again it will contain the settings from the last time that you used the program. When this is toggled on, all the other options within this section of *Options* will be disabled.

The *Save Form Values for This Company* option works in the same way as the *Save Form Values as Default*, except that it is for this company only. So if an operator needs to have different defaults for each company, it can be accomplished using this option. This option does not affect the settings of other operators using the same company. The *Remove Company Form Values* option removes these defaults for this operator, for this company.

There are five options within the second section. These are: *Always Show Buttons*, *Show Captions in Bold*, *Captions Background Color*, *Show Grid Lines*, and *Show Icons for Custom Fields*. Apart from changing the caption's background color, all of these options are toggled on/off. The *Captions Background Color* option enables you to change the background color of all the captions on the current form. When selected, you are given a choice of 40 colors, or you can select the *More Colors* option and choose from additional ones (see **Figure 4-46**). Once selected, the background color is changed for all the captions on the current form (see **Figure 4-47**).



**Figure 4-47:** The background color of the captions has been change to match the selected color

The *Always Show Buttons* option specifies whether the buttons on a form are always shown, or if they should only appear against a field that has a button when the field is selected. This helps reduce the

clutter on the screen. **Figure 4-47** shows where this option is set on. All buttons, including those that are used for the dropdown lists, for the date picker, and browses are being shown.

**Figure 4-48** shows a section of the same form once this option has been set off; looking less cluttered, but not making it so obvious which items have clickable items against them.

Report Options	
<b>Documents</b>	
Document type	Delivery note
Document date	25/05/2011
Format	0
Format description	Invoice
Period	02 / 2011
Reprint	<input type="checkbox"/>
Sequence	<input checked="" type="radio"/> Sales order <input type="radio"/> Alternate key

**Figure 4-48:** The *Always Show Buttons* option set off

Report Options	
<b>Documents</b>	
Document type	Delivery note
Document date	25/05/2011
Format	0
Format description	Invoice
Period	02 / 2011
Reprint	<input type="checkbox"/>
Sequence	<input checked="" type="radio"/> Sales order <input type="radio"/> Alternate key

**Figure 4-49:** The *Show Grid Lines* option set off

The *Show Captions in Bold* option enables you to display all the captions on this form in bold. If you want to do this for a specific caption you should use the option against the *Field Properties*. The *Show Grid Lines* option is on by default and displays the lines between fields, and between the caption and the value of each field. **Figure 4-49** shows the same form with the *Show Grid Lines* option set off. Although this has a cleaner look, it can become difficult to see which value matches up to which caption when there are many fields that are not part of a group.

The *Show Icons for Custom Fields* option works slightly differently to the other options in that it affects all display and entry forms. When this option is enabled it places an icon at the beginning of the caption of each field that has been added to a form, regardless of whether they are custom form fields, related fields, or scripted fields.

**Figure 4-50** shows the *Order Header* form of *Sales Order Entry*. The fields *Cancelled order*, *Vehicle Code*, and *Ship to number* are all fields that have been added to this form using the *Field Selector*.

Order Header	
Sales order	
Document type	0
Customer purchase order	888-366-74
Order branch	10
Cancelled order	
Vehicle Code	356
Salesperson	100
Ship to number	5
Order date	25/05/2011
Ship date	25/05/2011
AR invoice terms	2
Ordered By:	T

**Figure 4-50:** The *Order Header* form with the *Show Icons for Custom Fields* option enabled

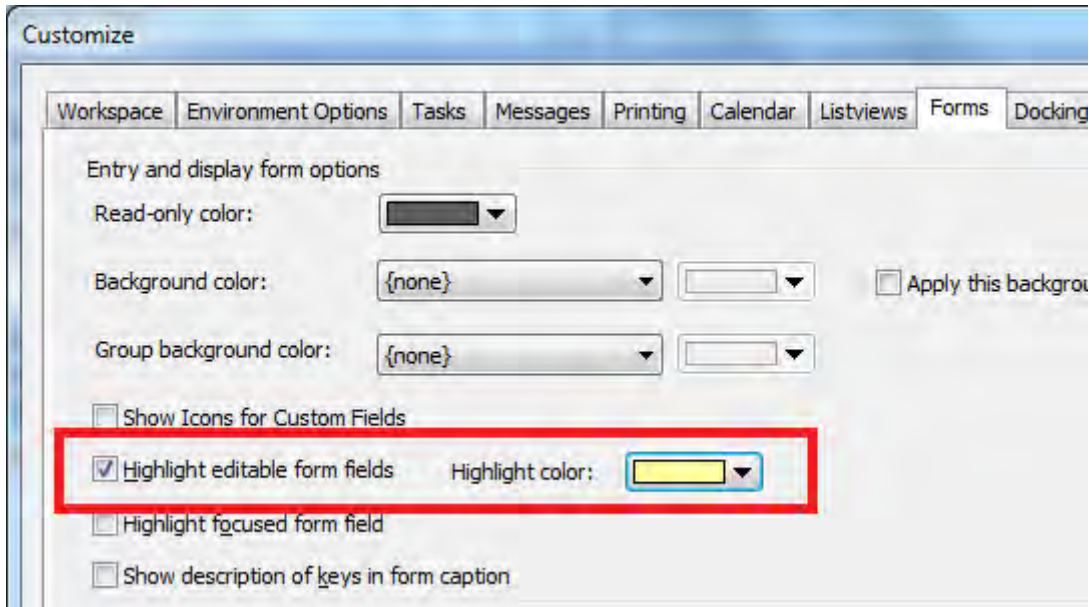
They have icons in front of their captions because *the Show Icons for Custom Fields* is enabled. The *Cancelled Order* field is a related field, the *Vehicle Code* field is a custom form field, and the *Ship to number* field is a scripted field.

The next section of *Options* contains three options, the first of which is *Highlight Editable Fields*. It is used to set the background color of the value section of all fields that are currently editable. This option works in conjunction with the *Highlight editable form fields* option on the *Forms* tab of the *Personalize* screen. If the *Highlight editable form fields* checkbox on the *Forms* tab is selected, the



*Highlight color* dropdown button is enabled and you can use this to specify the color of the background. If the *Highlight editable form fields* checkbox remains checked, this will be applied to all entry forms and the *Highlight Editable Forms* option against individual entry forms will be disabled.

If the *Highlight editable form fields* checkbox is unchecked, although the *Highlight color* dropdown is greyed-out, the color remains set. The *Highlight Editable Forms* option against individual forms becomes available and the operator can decide against which entry forms they want to use this option. **Figure 4-51** shows the *Highlight editable form fields* checkbox checked, so that the color can be set.

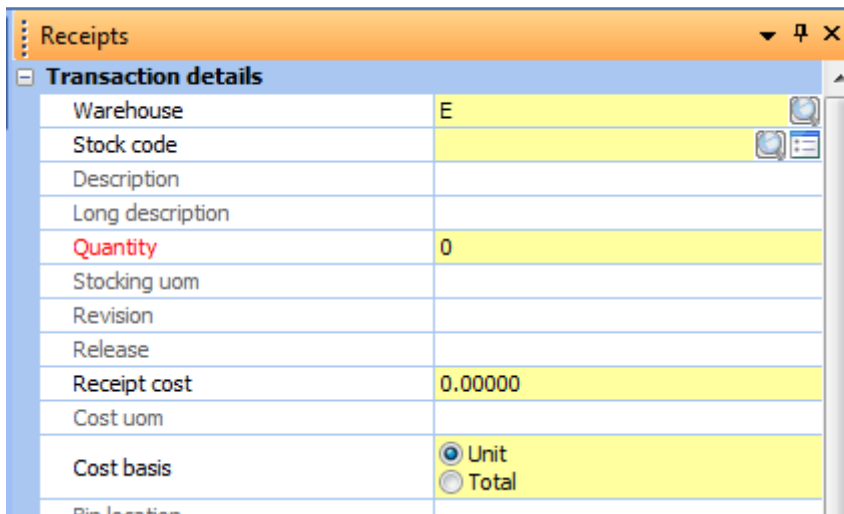


**Figure 4-51:** Specifying the background color for editable fields

**Figure 4-52** shows the *Receipts* form of the *Inventory Movements* program. This form has had its *Highlight Editable Forms* option selected, so all the fields that are currently editable are highlighted in the chosen color. As the operator enters data, some of the fields will no longer be highlighted and others will become highlighted.

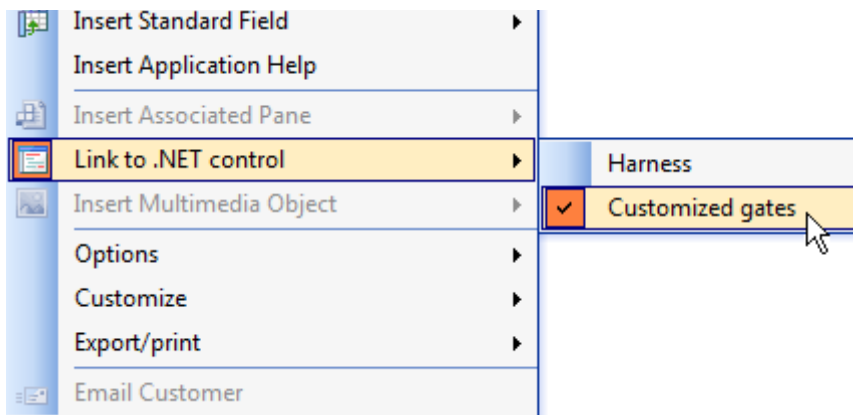
The next option is *Link to .NET control*. It is only available if there is a customized pane against this program that is configured to use a *.NET User Control*. Selecting this option against a field forces the refresh event against the customized pane to be fired when this field's value changes. The selected customized pane title against the *Link to .NET Control* option will have a check placed against it. To remove this link, uncheck this option. As the configuration of a customized pane with a *.NET user*

control requires VBScripting (and other coding if you are going to write the user control) it falls outside the scope of this document.



**Figure 4-52:** The *Receipts* form of *Inventory Movements* highlighting the value portion of the fields that are editable, and highlighting the caption of the field that is linked to a .NET control

**Figure 4-53** shows the linking of the currently highlighted field to the *Customized gate* customized pane. Once this linking has taken place, the caption of the field that was linked will be highlighted in red. **Figure 4-52** shows that the *Quantity* field has been linked to the *Customized gate* customized pane, as its caption is in red.



**Figure 4-53:** Linking the currently selected field to the *Customized gate* customized pane

The third option of this section is *Sunken appearance*. Selecting this option will perform three changes to the form. Regardless of whether the grid lines are selected, they will appear as dotted lines. All buttons will be changed to make them appear to stand proud of the form. The currently selected field will be changed to make it appear as if it is sunken below the level of the form. **Figure 4-54** shows the *Sunken appearance* option selected for the *Receipts* form of *Inventory Movements*. The grid lines are dotted lines, the buttons have been raised, and the currently selected field (*Stock code*) has been sunken.

Receipts	
Transaction details	
Warehouse	E
Stock code	
Description	
Long description	
Quantity	0
Stocking uom	

**Figure 4-54:** The *Receipts* form with the *Sunken appearance* option selected

The last two options in the *Options* section are *Alignment for Numerics* and *Alignment for Captions*. Both of these options have three choices, *Left*, *Center*, and *Right*, and both default to *Left*. The *Alignment for Numerics* option positions the numeric value within the value portion of a field. The *Alignment for Captions* option positions the caption text within the caption portion of a field.

## Form Toolbar

Using the default settings, some listviews may return significant amounts of data. It will take longer to retrieve the data from the server and display it, as well as make it more difficult for the operator to locate the information that they need.

The listviews that are likely to retrieve the most data (such as the *Movements* listview of the *Inventory Query*) are linked to a *Form Toolbar*. The form toolbar is a form containing one or more selection criteria enabling the operator to reduce the amount of returned data, so that it only contains what they need. As the form toolbar is a form, it can be moved in relation to the listview using the docking stickers, or minimized to a tab. However, the form toolbar cannot be floated.

**Figure 4-55** shows the *Warehouse History* listview of the *Inventory Query*. Alongside this is the *Warehouse History Selection* form toolbar. This toolbar contains only a few selection criteria. If any of

the criteria are changed, the *Refresh Warehouse History* button on the toolbar becomes enabled so that you can refresh the content of the listview in isolation.

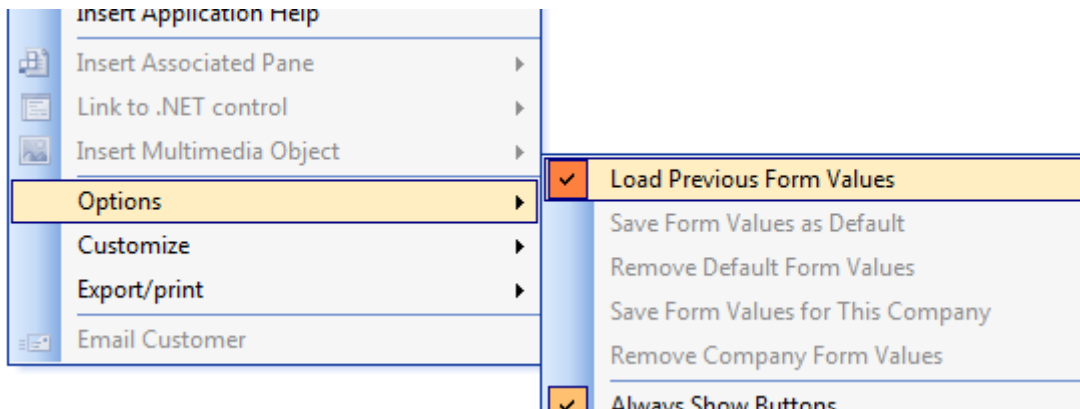
Warehouse	MTD sold/issued	Prev 1 sold/issued	Prev 2 sold/issued	Prev 3 sold/issued	Prev 4 sold/issued
Combined	1458.000	1145.000	1130.000	325.000	
E	200.000	110.000	250.000	50.000	
FG	3.000	0.000	0.000	0.000	
N	1105.000	900.000	500.000	250.000	
S	150.000	135.000	380.000	25.000	

The right-hand panel, titled 'Warehouse History Selection', includes a 'Refresh Warehouse History' button and an 'Autoload Values' dropdown. Below this is a 'Warehouses' section with the following options:

- Combine warehouses:
- Warehouse selection:  All,  Single,  List
- Warehouse: [Text field]
- List of warehouses: [Define list](#)
- Multiple company values:

**Figure 4-55:** The *Invoices* section of the *AR Customer Query* sorted by the *Original amount – Local* column

The *Autoload Values* button on the toolbar contains five options. These are *Load Previous Form Values*, *Save Form Values as Default*, *Save Form Values for this Company*, *Remove Default Form Values*, and *Remove Company Form Values*. These directly map onto the five options with the same name that appear under the *Options* section of the form's context-sensitive menu (see **Figure 4-56**), and have been made available under this button for ease of access. The functioning of these options has been covered under the *Options* section above, so will not be duplicated here.



**Figure 4-56:** The five *Autoload Values* options match those under the forms *Options* section

## Personalization Options Affecting Forms

On the *Forms* tab of the *Personalize* program are options that affect the behaviour of forms. The first option is *Read-only color*. For display forms, this specifies the color of the value text for those fields that contain a value (excluding those that are hyperlinked). For entry forms, it specifies the color of the text of both the caption and displayed values for those fields that are currently set to read only.

As fields become read-only, or are no longer read-only, the color of their caption and value will change. For example, call up the *AR Customer Maintenance* program and most fields will be displayed in this color. If you use the *Next* button to get the next customer code, you are in display mode and the fields will remain in this color. However, if you tab off of the customer field you are in entry mode and most of the fields will appear in the normal color. Only those fields that are read only (such as *Customer*) will appear in your chosen color.

The second group of options is used to set the background color. The *Background color* option has a dropdown list against it. The default is *{none}* and all except one of the other choices relate to colors assigned to Windows properties, such as *Menu Text*. The last item in the dropdown list is *Other*. If this is selected the dropdown list next to this one is enabled, which contains a color chooser where you can see the color that you have chosen. After using the *Apply* button at the bottom of the screen, the background color of all forms that you have not accessed before will appear in this color. Those forms that you have accessed before will retain their previous color because this is saved as you exit the program.

If you wish to force the change on all forms you should check the *Apply this background color to all forms* option, and all forms of programs that you call up from this point onwards will have this background color. When you exit these programs the new background color will be saved for them. If you uncheck this option and remove the color setting, those programs that have been called up will still have this color saved against them and continue to use it. To globally remove all background form colors you should set the *Background color* to *{none}* and check the *Apply this background color to all forms* option. As these programs are called up the color will be changed to the default, and this will be saved as you exit the program.

The third group of options is used to set the background color of the value portion of fields that belong to a group. The *Group background color* option has a dropdown list against it that contains the same options as the *Background color* dropdown list. If the *Other* option is selected from this list the second dropdown list also contains a color chooser. However, unlike the *Group background color* option this color change is not saved against the program. So whatever it is currently set to is the color that will be used for the group background when you call up a program.

The *Show Icons for Custom Fields* option affects all display and entry forms. When this option is enabled it places an icon at the beginning of the caption of each field that has been added to a form, regardless of whether they are custom form fields, related fields, or scripted fields.

**Figure 4-50** shows the *Order Header* form of the *Sales Order Entry* program. The fields: *Cancelled order*, *Vehicle Code*, and *Ship to number* are all fields that have been added to this form using the *Field Selector*. They have icons in front of their captions because the *Show Icons for Custom Fields* is enabled. The *Cancelled Order* field is a related field; the *Vehicle Code* field is a custom form field; and the *Ship to number* field is a scripted field.

The *Highlight Editable Fields* option is used to set the background color of the value section of all fields that are currently editable. If this is selected it disables the option with the same name against the individual forms. The fields that are currently editable may change as data is entered and fields are no longer editable. **Figure 4-51** shows the *Highlight editable form fields* checkbox checked and the color set, and **Figure 4-52** shows how the form will look with the background of these editable fields displayed in this color.

The *Highlight focused form field* option is used to highlight the value part of the field that currently has focus set on it by placing a rectangle around it. **Figure 4-57** shows that focus is set on the *Customer purchase order* field on the *Order Header* form of the *Sales Order Entry and Maintenance* program. If the operator tabbed off this field, so that focus is set on the *Order branch* field, the value part of the *Order branch* field would have the rectangle around it instead of around the *Customer purchase order* field.

The *Show description of keys in the form caption* option displays the description that matches the code entered when entering values for fields such as a branch, salesperson, or currency. For example, in the *Order Header* form of the *Sales Order Entry and Maintenance* program, there are many fields where you typically enter a 1 to 3 character code. In addition to the code being displayed, the matching description for this code appears in parentheses within the caption portion of the field.

Order Header	
Sales order	
Document type	O
Customer purchase order	
Order branch	10
Salesperson	100
Order date	30/05/2011
Ship date	30/05/2011
AR invoice terms	2
Ordered By:	T

**Figure 4-57:** Focus is on *Customer purchase order* with the *Highlight focused form field* option set

**Figure 4-58** shows the matching descriptions for values against the *Order branch*, *Salesperson*, *AR invoice terms*, *Ordered By*, and *Area* fields being displayed in parentheses within the caption portion of the field.

Order Header		
Sales order		
Document type	O	
Customer purchase order		
Order branch	(Receivables - North) 10	
Salesperson	(Tony Dean) 100	
Order date	30/05/2011	31
Ship date	30/05/2011	31
AR invoice terms	(60 Days - Net , Discount%: 0.00) 2	
Ordered By:	(Order placed by telephone) T	
<b>+ Order discount percentage</b>		
<b>+ Tax</b>		
Area	(Northern Region) N	
Ship via	Ro	
Order status	-	
<b>+ Ship to address</b>		

**Figure 4-58:** The descriptions matching the values entered appearing in the caption portion of the field when the *Show description of keys in the form caption* option is used

On the *Listviews* tab of the *Personalize* program is the *Default font for listview and forms* option. This sets the default font for all forms and listviews for the current operator. If the font is changed, programs that an operator has previously used will still have the previous font, as this will have been saved against the program. Programs that have not previously been called up will use this new default font. Checking the *Apply font to all* checkbox will force all the forms to use this font. **Figure 4-59** shows the *Listviews* tab of the *Personalize* program that contains the default font option.

Customize

Workspace | Environment Options | Tasks | Messages | Printing | Calendar | Listviews | Forms | Docking Panes | Toolbars | Graphs

Default font for listviews and forms: Algerian, 10pt   Apply font to all

Default font for listview captions: Tahoma, 8pt   Apply font to all captions

**Figure 4-59:** The *Listviews* tab of the *Personalize* program

## System-wide Personalization Options Affecting Forms

There are five *System-wide Personalization* options that can be used to change the way that forms are displayed, and these appear within the *Forms* section (see **Figure 4-60**). They are used by an administrator to override the settings that operators can make within the *Personalize* program and against the individual forms.

The first two are used to override the operator's default font that appears on the *Listviews* tab of the *Personalize* program (see **Figure 4-59**). When this is done the system-wide font replaces the operator's default font in the *Personalize* program, and the *Change Font* button is greyed-out. The operator can still change the font for individual fields using the *Form Properties* option, but cannot make global changes to all forms and listviews. If an operator has previously set a font for a field using the *Form properties* option, the system-wide option will not overwrite it.

The next option is *Show captions in bold*. If this is checked, the next time that an operator logs in and calls up a program they will see all the captions for all the forms displayed in bold. The *Show Captions in Bold* option will be checked against all the forms. If they right-click on the caption of a form and select *Options* from the context-sensitive menu, they can uncheck the *Show Captions in Bold* and the captions will no longer be bold. However, when they next log in the setting will be re-imposed.

If this system-wide option is switched off, the forms in those programs that the operator has called up while the option was switched on will still have their captions in bold. This is because the system-wide option *Show captions in bold* set the option against the individual form for this operator and when the operator exited the program, this setting was saved. To turn this off the operator will need to uncheck this option for each form individually.

Forms	
Override font	<input checked="" type="checkbox"/>
Font	Arial; 10pt
Show captions in bold	<input type="checkbox"/>
Show icons for custom fields	<input type="checkbox"/>
Default numeric alignment	Left

**Figure 4-60:** The *Forms* section of the *System-wide Personalization* screen

The system-wide personalization *Show icons for custom fields* option is checked by default. If this is unchecked, the matching option under *Personalize* becomes unchecked. This unchecks the same option against the individual forms. If the system-wide option is checked again it does not affect the personalize option.



The final option in this section is *Default numeric alignment*, and it defaults to *Right*. This specifies where, within the value section of a field, a numeric value should reside. The options are: *Left*, *Center* and *Right*. This becomes the default for all programs that the operator has not yet called up. Those that have already been run will have their settings saved when the operator exited the program. If the operator calls up a new program and changes this setting against a form, this setting will be saved when they exit the program.

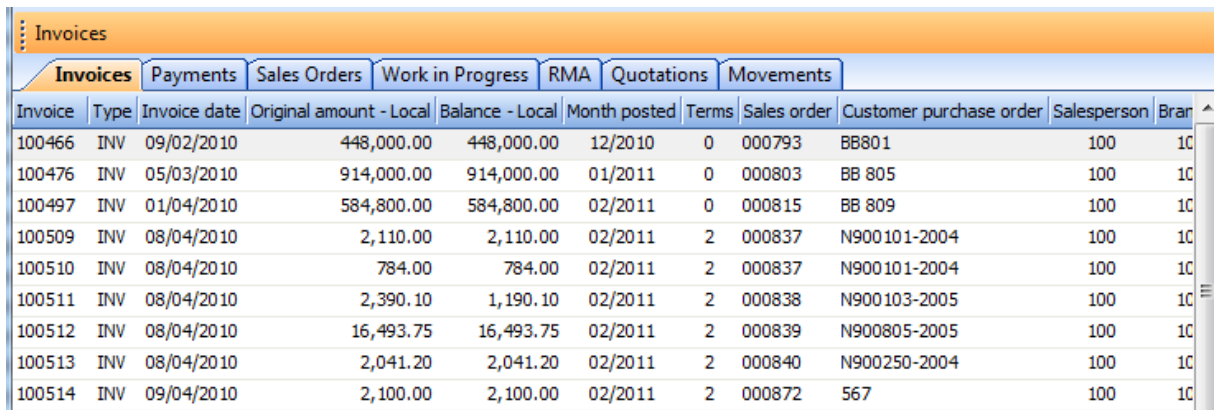


## Chapter 5 - Listviews and Data Grids

### Listviews

*Listviews* are a useful means of displaying significant amounts of data. They are similar to spreadsheets (in that they have rows, columns and cells) but you cannot post data into them. There are two basic types of listviews: the ones provided by default in SYSPRO and customized pane listviews. Creating a customized pane listview falls outside the scope of this document, as it requires knowledge of VBScripting. However, there are several pre-defined customized pane and associated pane listviews available, so the use of these will be covered under the *Customized Pane* and *Associated Pane* section of this document.

A listview consists of columns (that go from the top to the bottom of the listview) and rows (that go from left to right). The point at which a column and a row intersect is called a cell, and this is what contains the data. Along the top of all the columns are the *Column Headers*. In **Figure 5-1**, *Invoice*, *Type*, *Invoice date*, *Original amount – Local*, etc., are all *Column Headers*. The *Column Header* is the starting place for most of the configuration and personalization of a listview.



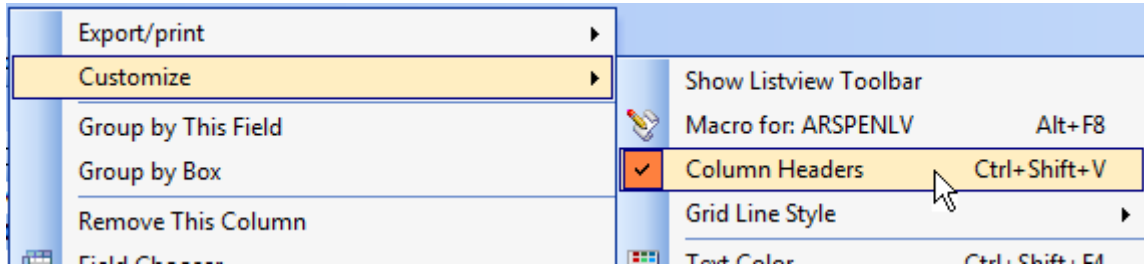
Invoices										
Invoices Payments Sales Orders Work in Progress RMA Quotations Movements										
Invoice	Type	Invoice date	Original amount - Local	Balance - Local	Month posted	Terms	Sales order	Customer purchase order	Salesperson	Branch
100466	INV	09/02/2010	448,000.00	448,000.00	12/2010	0	000793	BB801	100	10
100476	INV	05/03/2010	914,000.00	914,000.00	01/2011	0	000803	BB 805	100	10
100497	INV	01/04/2010	584,800.00	584,800.00	02/2011	0	000815	BB 809	100	10
100509	INV	08/04/2010	2,110.00	2,110.00	02/2011	2	000837	N900101-2004	100	10
100510	INV	08/04/2010	784.00	784.00	02/2011	2	000837	N900101-2004	100	10
100511	INV	08/04/2010	2,390.10	1,190.10	02/2011	2	000838	N900103-2005	100	10
100512	INV	08/04/2010	16,493.75	16,493.75	02/2011	2	000839	N900805-2005	100	10
100513	INV	08/04/2010	2,041.20	2,041.20	02/2011	2	000840	N900250-2004	100	10
100514	INV	09/04/2010	2,100.00	2,100.00	02/2011	2	000872	567	100	10

**Figure 5-1:** The *Invoices* section of the *AR Customer Query*

As well as specifying the content of the column, the column header is used to initiate most changes to the listview, by right-clicking on it and using the context-sensitive menu (the context-sensitive menu is

available at any time by highlighting the listview and using the shortcut keystrokes *Ctrl + F1*). The column header can be removed by either right-clicking on the column header and unchecking the *Column Headers* option, or highlighting the listview and using the shortcut keystrokes *Ctrl + Shift + V*.

The only way to get the column headers back once they have been removed is with the shortcut keystrokes: *Ctrl + Shift + V*.



**Figure 5-2:** Removing the *Column Headers* using the context-sensitive menu

## Sorting

The most basic thing that you can do with the column header is to click on one of the column headings. This will sort all the data in this listview, in ascending sequence by the value in this column.

**Figure 5-3** shows the same listview as **Figure 5-1**, after the *Original amount – Local* column heading has been clicked. The content of the listview has been sorted in ascending sequence by the values in this column. Note that an icon has been added to its column heading to show that the listview has been sorted by this column. If you change customer, the new data in the listview will also be sorted by this column.

Invoices										
Invoices Payments Sales Orders Work in Progress RMA Quotations Movements										
Invoice	Type	Invoice date	Original amount - ...	Balance - Local	Month posted	Terms	Sales order	Customer purchase order	Salesperson	Branch
800055	C/N	08/04/2010	-86.00	-86.00	02/2011	2		CREDIT AUTHORISED	100	10
_CRD01	INV	31/03/2010	0.00	-2,500.00	02/2011	2		Unapplied cash	100	10
900036	D/N	08/04/2010	250.00	250.00	02/2011	2			100	10
100517	INV	18/10/2010	560.00	560.00	02/2011	2	111113	5656	100	10
789800	INV	20/10/2010	560.00	560.00	02/2011	2	111116	889	100	10
100510	INV	08/04/2010	784.00	784.00	02/2011	2	000837	N900101-2004	100	10
100518	INV	19/10/2010	1,120.00	1,120.00	02/2011	2	111114	wwwwww	100	10
100519	INV	28/03/2011	1,120.00	1,120.00	02/2011	2	000953	545445	100	10
100520	INV	28/03/2011	1,120.00	1,120.00	02/2011	2	000954	4654	100	10

**Figure 5-3:** The *Invoices* section of the *AR Customer Query* sorted by the *Original amount – Local* column

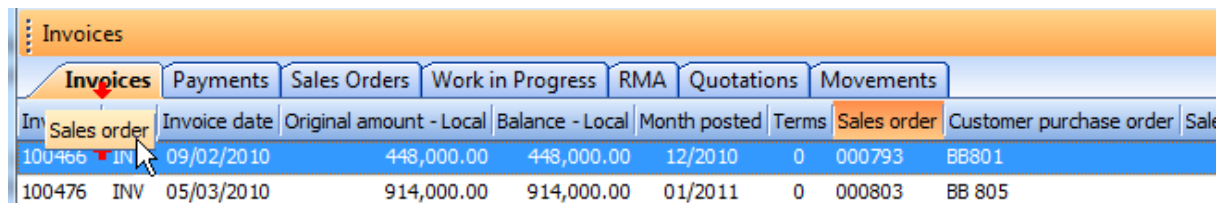
If the same column heading is clicked again the sort will change from ascending sequence to descending sequence, and the icon will appear the other way up. Clicking on the column heading of another column such as *Sales order* will change the sort to ascending by that column, instead of by the *Original amount – Local* column.

To remove the sort, right-click on one of the column headers and select *Clear Sort Items* from the context-sensitive menu that is displayed. The icon will be removed from the column header and the existing data will remain as it is. When a new customer is selected the data in the listview will be displayed in the default sequence.

If you need to sort the contents of the listview by two or more columns, you can do this by clicking on the column header of the first column, then hold down the *Ctrl + Shift* keys and click on the second (or subsequent) column header. The rows in the listview are sorted by the first column that you clicked on and, where there is more than one row with the same value, those rows will be sorted by the values in the second selected column. The icon that appears against the column header to show that the listview is sorted by this column will appear against both column headers. Removing the sort is done in the same way as for a single column.

## Columns

A listview can contain two or more columns. If an operator decides that they don't like the sequence in which the columns appear, they can change the sequence by dragging a column heading to a new location and releasing it. **Figure 5-4** shows the *Sales order* column heading being repositioned. As the column heading moves over the other column headers, two red arrows show where it will be placed if it were released. In this case, the *Sales order* heading is released between the *Invoice* and *Type* column headers.



Invoices									
Invoices	Payments	Sales Orders	Work in Progress	RMA	Quotations	Movements			
Inv	Sales order	Invoice date	Original amount - Local	Balance - Local	Month posted	Terms	Sales order	Customer purchase order	Sale
100466	IN	09/02/2010	448,000.00	448,000.00	12/2010	0	000793	BB801	
100476	INV	05/03/2010	914,000.00	914,000.00	01/2011	0	000803	BB 805	

**Figure 5-4:** Dragging the *Sales order* column header, with the placement arrows showing the location that it will be inserted if it were released

When the column header is released, it is inserted at the point highlighted by the two red arrows and its data will appear below it. All the columns to the right are shuffled along. **Figure 5-5** shows the *Sales order* column in its new location.

Invoices									
Invoices Payments Sales Orders Work in Progress RMA Quotations Movements									
Invoice	Sales order	Type	Invoice date	Original amount - Local	Balance - Local	Month posted	Terms	Customer purchase order	Sale
100466	000793	INV	09/02/2010	448,000.00	448,000.00	12/2010	0	BB801	
100476	000803	INV	05/03/2010	914,000.00	914,000.00	01/2011	0	BB 805	

**Figure 5-5:** The *Sales order* column inserted between the *Invoice* and *Type* columns

When there are many columns in a listview and the *Automatic Column Sizing* option is unchecked, a scrollbar will appear at the bottom of the screen. If the operator wants to move a column to a new location (and this is more than the width of the currently displayed portion of the listview) it can be achieved in one step. Using the same listview as appears in **Figure 5-5**, the *Ageing* column is on the far right (beyond what can be seen in **Figure 5-5**). Click on the column heading you want to move and drag this column heading horizontally to the left, making sure that it remains over the other column headers. Keep moving it to the left until some portion of it extends beyond the edge of the listview. At this point, the column headers in the listview will move to the right so that those that were to the left of the visible portion of the listview will start to appear. The further that this column header extends beyond the edge of the listview, the faster the column headers will move to the right. Once you have reached the point where this column heading must reside, you can move it over the location and release it.

Movements									
Warehouse Values Warehouse History Movements									
Date	Type	Warehouse	Period	Ref/invoice	Trn type	Quantity	Transaction value	Customer	Supplier
15/03/2008	Inv	E	2009/01	000000038	Rec	500.000	175,000.00	0000000	
20/03/2008	Sale	E	2009/01	100292	Inv	200.000	70,000.00	0000004	
26/04/2008	Sale	E	2009/01	100297	Inv	200.000	70,000.00	0000004	
26/04/2008	Sale	E	2009/02	100302	Inv	200.000	70,000.00	0000004	
29/04/2008	Inv	E	2009/02	000000046	Rec	500.000	175,000.00	0000000	

**Figure 5-6:** Removing columns from a listview

Operators can make more space available in a listview by removing unwanted columns. This is done by dragging a column heading from the column header. The whole column (column heading and data) is removed from the listview. This column heading will appear in the *Field Chooser* so that it can be reused in the listview. **Figure 5-6** shows the *Period* column heading being dragged from the column

header section. The mouse pointer has changed to an X. If the column heading is dropped anywhere except on the column header (which can be seen by the two red arrows indicating to where the column will be positioned) it will be removed from the listview, but still be available in the *Field Chooser*. Columns can also be removed from the listview by using the *Remove This Column* option from the context-sensitive menu that appears when you right-click on the column header.

When there are columns available than can practically be displayed in a listview, the most logical ones will appear by default. The additional ones appear in the *Field Chooser* for the listview. An example of this is the *Movements* listview of the *Inventory Query*, where there are a great number of fields that could appear and there are more fields in the field chooser than in the listview (see **Figure 5-7**).

## Field Chooser

The field chooser shows a list of all the available column headings that are not currently displayed in the listview, in alphabetic sequence. The field chooser can be seen in **Figure 5-7**.

These columns can be dragged onto the column header, and the column will be added to the listview where the two red arrows appear. The data for the added column is populated immediately.

Date	Type	Warehouse	Period	Ref/invoice	Trn type	Quantity	Transaction value	Customer	Supplier	Unit cost	Unit price/new cost	Sale amount	Sales order
15/03/2008	Inv	E	2009/01	000000038	Rec	500.000	175,000.00	0000001		350.00000	350.00000		
20/03/2008	Inv	E	2009/01	100292	Inv	200.000	70,000.00	0000004		350.00000	560.00000	112,000.00	000653
26/03/2008	Inv	E	2009/01	100297	Inv	200.000	70,000.00	0000004		350.00000	560.00000	112,000.00	000658
26/03/2008	Inv	E	2009/01	100302	Inv	200.000	70,000.00	0000004		350.00000	560.00000	112,000.00	000661
29/03/2008	Inv	E	2009/01	000000046	Rec	500.000	175,000.00	0000001		350.00000	350.00000		
17/03/2008	Inv	E	2009/01	000000051	Rec	500.000	175,000.00	0000001		350.00000	350.00000		
29/03/2008	Inv	E	2009/01	100311	Inv	50.000	17,500.00	0000004		350.00000	560.00000	28,000.00	000665
14/03/2008	Inv	E	2009/01	000000059	Rec	500.000	175,000.00	0000001		350.00000	350.00000		
08/03/2008	Inv	E	2009/01	100319	Inv	50.000	17,500.00	0000006		350.00000	560.00000	28,000.00	000673
22/03/2008	Inv	E	2009/01	000000063	Rec	300.000	105,000.00	0000001		350.00000	350.00000		
09/03/2008	Inv	E	2009/01	100327	Inv	50.000	17,500.00	0000006		350.00000	560.00000	28,000.00	000677
09/03/2008	Inv	E	2009/01	100333	Inv	100.000	35,000.00	0000004		350.00000	560.00000	56,000.00	000682
09/03/2008	Inv	E	2009/01	100334	Inv	100.000	35,000.00	0000006		350.00000	560.00000	56,000.00	000683
20/03/2008	Inv	E	2009/01	000000082	Rec	500.000	175,000.00	0000001		350.00000	350.00000		
11/10/2008	Sale	E	2009/08	100339	Inv	300.000	105,000.00	0000004		350.00000	560.00000	168,000.00	000688
25/10/2008	Inv	E	2009/08	000000083	Rec	100.000	35,000.00	0000001		350.00000	350.00000		

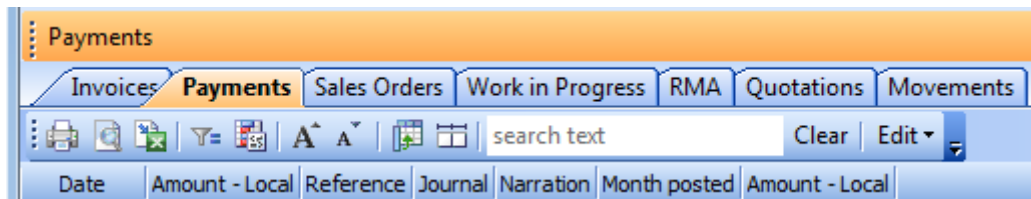
**Figure 5-7:** The *Field Chooser* for the *Movements* listview of *Inventory Query*

## Listview Toolbar

The listview toolbar is a toolbar that contains many of the functions that can be performed using the context-sensitive menu that appears when you right-click on the column header.

The listview toolbar is not displayed by default. There is a core list of these functions that are always available on the toolbar, and some listviews have additional ones added to the beginning of the toolbar that are specific to this listview. **Figure 5-8** shows the basic listview toolbar directly above the column headers.

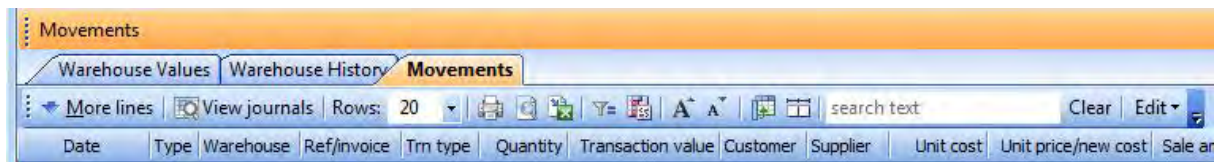
The core functions of the listview toolbar are: *Print, Print Preview, Export to Excel, Filter Columns, Advanced Conditional Formatting, Increase Font, Decrease Font, Field Chooser, Best Fit, Search text,* and *Clear*. These can be seen in **Figure 5-8**. As all of these are covered in other sections of this document; they are not covered individually here.



**Figure 5-8:** The *Listview Toolbar* above the *Column Headers*

**Figure 5-9** shows the listview toolbar against the *Movements* tab of the *Inventory Query*. In addition to the core functions, this listview toolbar has the *More lines*, *View journals*, and *Rows* functions which are specific to this listview. For example, the *More lines* option becomes enabled if you have chosen to display a specified number of rows and there are more rows than this to be displayed. The *More lines* button remains enabled until all the available rows have been displayed.

There is no keystroke shortcut to bring up the listview toolbar; it has to be done from the context-sensitive menu.



**Figure 5-9:** The *Listview Toolbar* against the *Movements* tab of *Inventory Query*



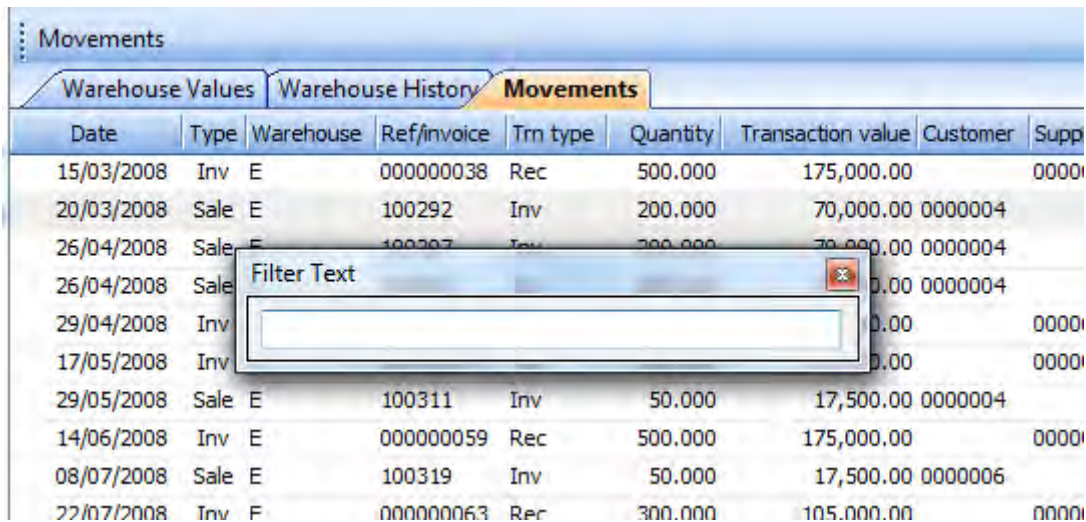
## Filter Rows/Search

The *Filter Rows* option is available from the context-sensitive menu that appears when you right-click on the column header, or by using the keystroke shortcut *Ctrl + F*. It is also available in the listview toolbar, where it is known as *Search*. If the *Filter Rows* option is selected from the menu, a small window is displayed called *Filter Text* (see **Figure 5-10**). If the listview toolbar is already being displayed, rather than displaying the filter text window the cursor is positioned within the *search text* section of the toolbar.

As you start typing into either of these sections, the rows in the listview are reduced to only those containing this text. Using the rows shown in **Figure 5-10**, typing in “3” will not change the rows displayed because all of those being displayed contain a “3”. Follow the “3” with a “1” and only the seventh and ninth lines would be displayed (see **Figure 5-11**).

As you remove the text within this section, the rows will start to reappear. If you close the *Filter Text* window, all the rows will return (as they will if you click on the *Clear* button alongside the *search text* window on the listview toolbar).

The number of rows that is currently being displayed appears at the bottom of the context-sensitive menu. This will change accordingly if you use the *Filter Text/Search* option (see **Figure 5-12**).



The screenshot shows a listview titled 'Movements' with three tabs: 'Warehouse Values', 'Warehouse History', and 'Movements'. The 'Movements' tab is active, displaying a table with the following columns: Date, Type, Warehouse, Ref/invoice, Trn type, Quantity, Transaction value, Customer, and Supp. The table contains 10 rows of data. A 'Filter Text' dialog box is overlaid on the table, with a text input field and a close button (X).

Date	Type	Warehouse	Ref/invoice	Trn type	Quantity	Transaction value	Customer	Supp
15/03/2008	Inv	E	000000038	Rec	500.000	175,000.00		0000
20/03/2008	Sale	E	100292	Inv	200.000	70,000.00	0000004	
26/04/2008	Sale	E	100297	Inv	200.000	70,000.00	0000004	
26/04/2008	Sale	E				0.00	0000004	
29/04/2008	Inv					0.00		0000
17/05/2008	Inv					0.00		0000
29/05/2008	Sale	E	100311	Inv	50.000	17,500.00	0000004	
14/06/2008	Inv	E	000000059	Rec	500.000	175,000.00		0000
08/07/2008	Sale	E	100319	Inv	50.000	17,500.00	0000006	
22/07/2008	Inv	F	000000063	Rec	300.000	105,000.00		0000

**Figure 5-10:** The *Filter Text* window

The screenshot shows a listview titled "Movements" with three tabs: "Warehouse Values", "Warehouse History", and "Movements". The "Movements" tab is active. The listview contains two rows of data. A "Filter Text" dialog box is open, showing the text "31" in its input field.

Date	Type	Warehouse	Ref/invoice	Trn type	Quantity	Transaction value	Customer	Sup
29/05/2008	Sale	E	100311	Inv	50.000	17,500.00	0000004	
08/07/2008	Sale	E	100319	Inv	50.000	17,500.00	0000006	

**Figure 5-11:** The rows matching the search criteria “31”

The screenshot shows a context-sensitive menu with the following items and keyboard shortcuts:

Adjust Rows to Display	Ctrl+F9
Find and Replace	Ctrl+Shift+F
Reset View	Ctrl+F5
Clear Sort Items	
Rows: 239	

**Figure 5-12:** The number of rows currently displayed appears at the bottom of the context-sensitive menu

## Locating Data

It is possible to locate specific items of data without changing the listview display (as is done when using the *Search/Filter Text* options). If the item to locate is in the default column (and you have not sorted the listview by any other column) simply selecting a row and typing in the value will take you to the first cell of this column starting with this value. If you continue typing it will find the first cell to start with this string.

If you select another column header (so that the listview is sorted by this column) as you type in the value you will be taken to the first cell in this column that starts with this value. The option to locate data in the listview does not work on columns that are defined as numeric.

**Figure 5-13** shows the *Receipt* listview of the *AP Supplier Query* program, where the default column is *Stock code*. By clicking on one of the rows, the listview is selected and by typing in the letter “L” the highlighted row has moved to the first row where the cell under the *Stock code* column contains an “L”.

If you continue to type in “OT12” the highlighted row would move to the one starting with stock code *LOT1204*.

If the *Description* column heading was clicked (so that the listview is sorted by the stock description) selecting a row and typing in “Rac” would highlight the row containing the first cell under the *Description* column where the value starts with “Rac”.

Receipt					
Invoices		Receipt	Scrap		
Stock code	Description	Wh	Purchase order	Line	
B112	Drive Train Assembly	RM	000363	1	
B112	Drive Train Assembly	RM	000429	1	
B1204	Head Tube Lower Lug	RM	000367	1	
B1205	Head Tube Upper Lug	RM	000367	2	
B1206	Seat Tube Upper Lug	RM	000367	3	
B1206	Seat Tube Upper Lug	RM	000429	2	
B1213	Adhesive for Rubber	RM	000362	1	
LOT112	Racing Drive Train Assembly	RM	000393	1	
LOT112	Racing Drive Train Assembly	RM	000399	1	
LOT1204	Racing Head Tube Lower Lug	RM	000397	1	
LOT1204	Racing Head Tube Lower Lug	RM	000399	2	
LOT1205	Racing Head Tube Upper Lug	RM	000397	2	
LOT1205	Racing Head Tube Upper Lug	RM	000399	3	
LOT1206	Racing Seat Tube Upper Lug	RM	000397	3	
LOT1206	Racing Seat Tube Upper Lug	RM	000399	4	
PC100	Comfort Frame Light - Blue	SP	000312	1	

**Figure 5-13:** Locating values within a listview by typing them in

## Group By

The *Group by Box* and *Group by This Field* options work together. Selecting the *Group by Box* option causes an area above the column header to be made available (see **Figure 5-14**).

Column headings can be dragged into this box. When this happens, this column heading will be removed from the column header and appear in the *Group by Box* section, and the contents of the listview will be grouped by this column.

If the operator holds down the *Ctrl* key as they drag the field to the *Group By Box*; the column will appear in the *Group By Box*; the listview will be grouped by this column; and the column will remain in the listview.

The screenshot shows the 'Movements' window with three tabs: 'Warehouse Values', 'Warehouse History', and 'Movements'. Below the tabs is a 'Group By Box' containing the text 'Drag a column header here to group by that column'. Below this is a table with the following data:

Date	Type	Warehouse	Period	Ref/invoice	Trn type	Quantity	Transaction value	Customer	Supplier
27/10/2009	Sale	E		100435	Inv	200.000	70,000.00	0000006	
27/10/2009	Sale	E		100439	Inv	100.000	35,000.00	0000012	
18/11/2009	Sale	E		100444	Inv	250.000	87,500.00	0000004	
18/11/2009	Sale	E		100445	Inv	200.000	70,000.00	0000006	

**Figure 5-14:** The *Group by Box* above the *Column Header*

**Figure 5-15** shows the *Customer* column heading being dragged to the *Group By Box* section. Once this is complete, the *Customer* column will be removed from the listview. All the rows in the listview are grouped by this field.

The screenshot shows the 'Movements' window with the 'Customer' column heading being dragged into the 'Group By Box'. The 'Customer' column heading is highlighted in orange. The table data is as follows:

Date	Type	Warehouse	Period	Ref/invoice	Trn type	Quantity	Transaction value	Customer	Supplier
27/10/2009	Sale	E	2010/08	100435	Inv	200.000	70,000.00	0000006	
27/10/2009	Sale	E	2010/08	100439	Inv	100.000	35,000.00	0000012	
18/11/2009	Sale	E	2010/09	100444	Inv	250.000	87,500.00	0000004	
18/11/2009	Sale	E	2010/09	100445	Inv	200.000	70,000.00	0000006	

**Figure 5-15:** Dragging the *Customer* column to the *Group by Box* section

Between those rows for one customer and those for another is a sub-heading containing the customer account number. Alongside this is a button to allow you to collapse/expand this customer (see **Figure 5-16**).

Date	Type	Warehouse	Period	Ref/invoice	Trn type	Quantity	Transaction value	Supplier
05/03/2010	Sale	S	2011/01	100481	Inv	10.000	3,500.00	
Customer: 0000009								
29/03/2010	Sale	N	2011/01	100493	Inv	100.000	35,000.00	
08/07/2008	Sale	S	2009/05	100321	Inv	20.000	7,000.00	
Customer: 0000010								
18/11/2009	Sale	E	2010/09	100448	Inv	500.000	175,000.00	
11/12/2008	Sale	N	2009/10	100357	Inv	500.000	175,000.00	

Figure 5-16: The listview grouped by the *Customer* column

It is possible to add more columns to the *Group by Box*; the contents of the listview will be sorted first by the primary group, then by the secondary group, etc. (see Figure 5-17).

Date	Type	Period	Ref/invoice	Trn type	Quantity	Transaction value	Supplier
01/04/2010	Sale	2011/02	100497	Inv	500.000	175,000.00	
09/04/2010	Sale	2011/02	100514	Inv	2.000	700.00	
Customer: 0000002							
Warehouse: N							
09/09/2008	Sale	2009/07	100331	Inv	150.000	52,500.00	
11/10/2008	Sale	2009/08	100338	Inv	100.000	35,000.00	
08/11/2008	Sale	2009/09	100345	Inv	100.000	35,000.00	

Figure 5-17: Multiple columns in the *Group by Box*

You can remove the columns from the *Group by Box* by either dragging them back onto the column header (in which case they will be added as a column again) or dragging them and dropping them somewhere else on the listview (in which case they will be removed from the listview and appear in the field chooser). In both cases the *Group by Box* remains, and must be removed by unchecking the *Group by Box* option from the context-sensitive menu.

The *Group by This Field* option will take the currently highlighted column heading; create the *Group by Box*; and add this column as the first item in this box. If the *Group by This Field* option is used on another column heading, it is added as a second grouping criterion. As this is creating the group by box, it is removed in the same way as mentioned above. Using the *Reset View* option will put all the columns back in their default location, but the group by box will remain and must be removed as mentioned above.

### Automatic Column Sizing

The *Automatic Column Sizing* option attempts to show all of the columns that are currently selected for this listview (i.e. all the columns that are not in the field chooser). If you resize the listview, all the columns will be proportionally resized. If you manually resize one of the columns and then resize the listview, it will resize all the columns in proportion to this new size.

With the automatic column sizing option unchecked, if you make the listview smaller the columns will remain the same size and a scrollbar will appear at the bottom of the listview. If you make the listview wider, the columns will remain the same size and the scrollbar will remain until the listview is wider than the space taken up by all the columns. If you keep making the listview wider beyond this point, a blank column will appear to the right and this will take up all the extra width.

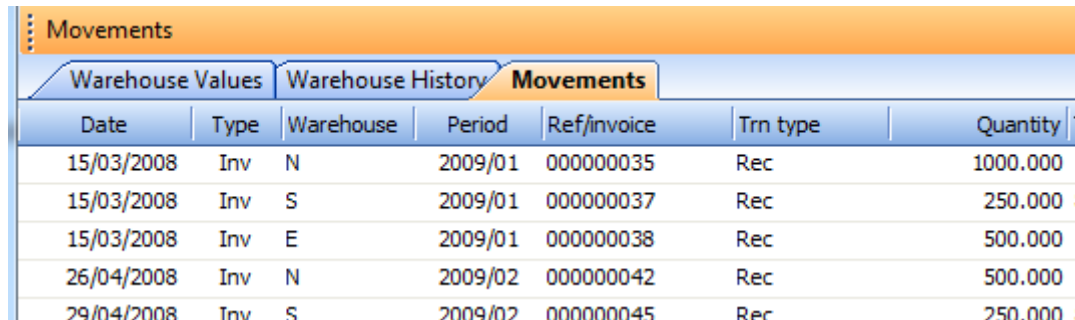
### Best Fit

The *Best Fit* option can be called either from the context-sensitive menu, or by using the *Shift + Alt + F5* shortcut keystrokes. It works differently depending on whether the *Automatic Column Sizing* option is checked. If it is not checked, the best fit option starts with the first column (the one at the left of the listview) and makes it the width of the column heading or the largest value in this column, whichever is wider. It then moves to the second column and also makes this the width of the column heading or the largest value in this column, whichever is wider. It proceeds to do this for all columns. If the total width of all the columns is greater than the width of the listview, a scrollbar is added to the bottom of the listview.

If the *Automatic Column Sizing* option is checked, the best fit option will perform the same calculations on the widths of each column. However, instead of making each of the columns the calculated width, it takes the total width of all the columns and divides it by the available width of the listview. All the columns then appear proportionally within the width of the listview.

## Alignment

The *Alignment* option is used to change the position of the value within a column. The available options are: *Left*, *Center*, and *Right*. **Figure 5-18** shows the first seven columns of the *Movements* listview from the *Inventory Query*. The *Date* column has its alignment set to *Center*. The *Warehouse* column has its alignment set to *Left*. The *Quantity* column has its alignment set to *Right*.

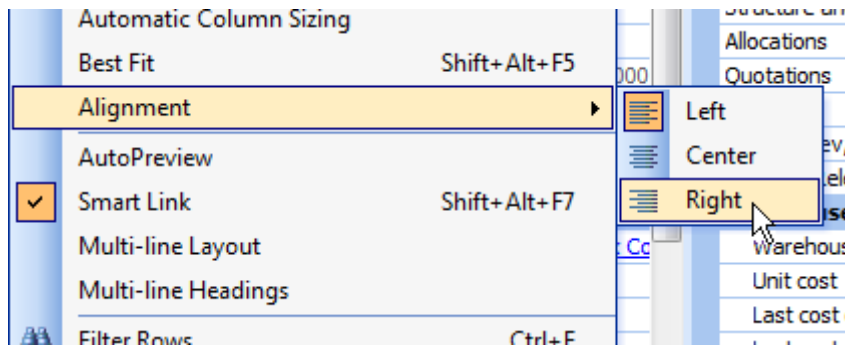


The screenshot shows a table with the following columns and their alignments:

Date	Type	Warehouse	Period	Ref/invoice	Trn type	Quantity
15/03/2008	Inv	N	2009/01	000000035	Rec	1000.000
15/03/2008	Inv	S	2009/01	000000037	Rec	250.000
15/03/2008	Inv	E	2009/01	000000038	Rec	500.000
26/04/2008	Inv	N	2009/02	000000042	Rec	500.000
29/04/2008	Inv	S	2009/02	000000045	Rec	250.000

**Figure 5-18:** The first seven columns of the *Movements* listview showing their alignment

The alignment is set by right-clicking on the relevant column heading and selecting *Alignment* from the context-sensitive menu. The current alignment for this column is highlighted and can be changed. **Figure 5-19** shows the changing of the alignment for the *Warehouse* column from the default of *Left*, to *Right*.



**Figure 5-19:** Changing the *Alignment* of the *Warehouse* column

After this has been done the alignment is changed immediately, as can be seen in **Figure 5-20**.

Movements						
Warehouse Values		Warehouse History		Movements		
Date	Type	Warehouse	Period	Ref/invoice	Trn type	Quantity
15/03/2008	Inv	N	2009/01	000000035	Rec	1000.000
15/03/2008	Inv	S	2009/01	000000037	Rec	250.000

**Figure 5-20:** The values in the *Warehouse* column after having the *Alignment* set to *Right*

## AutoPreview

The *AutoPreview* option is selected from the context-sensitive menu. It enables the display of additional line(s) of complementary information in the listview, where this has been catered for by the developer. **Figure 5-21** shows the *Contact Query* without the auto preview option configured.

Contacts: Bayside Manufacturing				
New Contact				
Contact	Edit co...	Preferred name	Job title	Work email
James Paddington	Edit	Jimmy	Marketing Director	james.paddington@bayside.com
George Avis	Edit	George	Engineer	george.avis@bayside.com

**Figure 5-21:** The *Contact Query* without the *AutoPreview*

When the auto preview option is selected, the content of the *Comment* field against the contact is displayed immediately beneath the contact's details. This saves having to select each contact in turn to see this information.

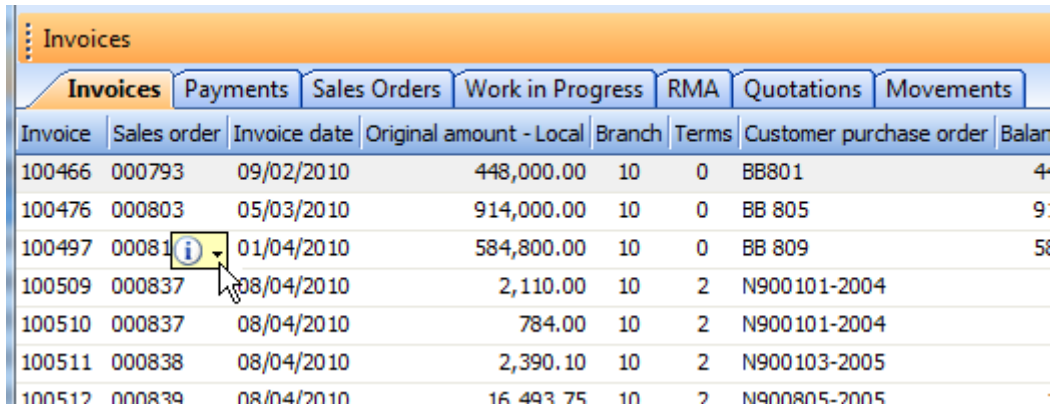
Contacts: Bayside Manufacturing				
New Contact				
Contact	Edit co...	Preferred name	Job title	Work email
James Paddington	Edit	Jimmy	Marketing Director	james.paddington@bayside.com
James is the decision maker				
George Avis	Edit	George	Engineer	george.avis@bayside.com
George is the person that gets things done				

**Figure 5-22:** The *Contact Query* with the *AutoPreview* selected.



## Smart Link

A *Smart Link* is a context-sensitive mini menu that appears as an icon against cells of smart link aware columns when the mouse pointer moves over them (see **Figure 5-23**).

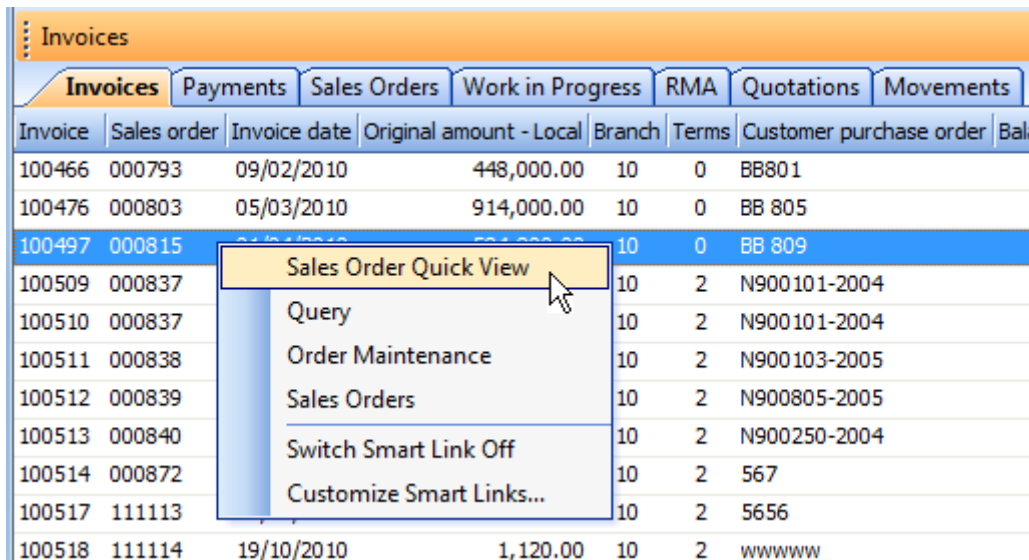


The screenshot shows a table titled 'Invoices' with a tabbed interface. The 'Invoices' tab is selected. The table has columns: Invoice, Sales order, Invoice date, Original amount - Local, Branch, Terms, Customer purchase order, and Balance. A mouse cursor is hovering over the 'Sales order' cell '000815' in the row for Invoice '100497', which has a small blue 'i' icon (the Smart Link icon) next to it.

Invoice	Sales order	Invoice date	Original amount - Local	Branch	Terms	Customer purchase order	Balance
100466	000793	09/02/2010	448,000.00	10	0	BB801	4...
100476	000803	05/03/2010	914,000.00	10	0	BB 805	9...
100497	000815	01/04/2010	584,800.00	10	0	BB 809	58...
100509	000837	08/04/2010	2,110.00	10	2	N900101-2004	
100510	000837	08/04/2010	784.00	10	2	N900101-2004	
100511	000838	08/04/2010	2,390.10	10	2	N900103-2005	
100512	000839	08/04/2010	16,493.75	10	2	N900805-2005	

**Figure 5-23:** The *Smart Link* icon against one of the cells of the *Sales order* column

**Figure 5-24** shows the mini menu that appears when the smart link icon is clicked. The content of the menu will change depending on the column to which the cell belongs.



The screenshot shows the same 'Invoices' table as Figure 5-23. The 'Sales order' cell '000815' for Invoice '100497' is now highlighted in blue. A context-sensitive mini menu is displayed over this cell. The menu items are: Sales Order Quick View, Query, Order Maintenance, Sales Orders, Switch Smart Link Off, and Customize Smart Links... A mouse cursor is pointing at the 'Sales Order Quick View' option.

Invoice	Sales order	Invoice date	Original amount - Local	Branch	Terms	Customer purchase order	Balance
100466	000793	09/02/2010	448,000.00	10	0	BB801	
100476	000803	05/03/2010	914,000.00	10	0	BB 805	
100497	000815	01/04/2010	584,800.00	10	0	BB 809	
100509	000837	08/04/2010	2,110.00	10	2	N900101-2004	
100510	000837	08/04/2010	784.00	10	2	N900101-2004	
100511	000838	08/04/2010	2,390.10	10	2	N900103-2005	
100512	000839	08/04/2010	16,493.75	10	2	N900805-2005	
100513	000840			10	2	N900250-2004	
100514	000872			10	2	567	
100517	111113			10	2	5656	
100518	111114	19/10/2010	1,120.00	10	2	wwwww	

**Figure 5-24:** The mini menu that is displayed when you click on the *Smart Link* icon

Smart links are enabled for all listviews by default. They can be toggled on/off by checking/unchecking the *Smart Link* option on the context-sensitive menu that appears when you right-click on the column header. Alternatively, you can use the *Shift + Alt + F7* shortcut keystrokes to toggle the smart links on/off, or the *Switch Smart Link Off* option from the smart link to turn them off. Turning the smart link option on/off affects the cells of all smart link aware columns on this listview. In **Figure 5-23** the *Invoice*, *Sales order* and *Branch* columns all contain cells that are smart link aware. Turning smart links on and off affects cells in all of these columns.

The smart link menu in **Figure 5-24** contains the option to show the sales order *Quick View*, perform a sales order query, launch the *Sales Order Entry and Maintenance* program, and call the sales order browse. The quick view shows additional header details for this sales order. The *Sales Order Query* and *Sales Order Entry and Maintenance* programs will be populated with data from this sales order, and the browse will start from this sales order number.



Hyperlinks are covered in the chapter on forms. Configuring the hyperlink involves supplying a field name and an action to perform when the hyperlink is clicked (either to run a SYSPRO program or an external application). If a field with this name appears in a display form the value is hyperlinked and, if the operator clicks on the hyperlink, the specified action is performed. If a column with this name appears within a listview, a smart link will appear against the cells in this column. Selecting the smart link will display a menu containing this hyperlink (see **Figure 25**).

der quantity	Price	Price u...	Line	Customer	Customer name
0.000	4,905.00000	EA	1.0000013	Out of Africa	
0.000	4,905.00000				
0.000	4,905.00000				
0.000	4,905.00000				

**Figure 5-25:** A hyperlink appearing as a menu item within a listview smart link

## Quick View

A *Quick View* is a customizable display of context-sensitive information and is activated using either a smart link, or a hyperlinked key field on a form. It can be moved freely on the screen or pinned to a specific position. Only one quick view can be displayed at a time, so if you already have one displayed and select to display a different one, the second one will overwrite the first. If you select the *Sales Order Quick View* option (as shown in **Figure 5-24**) a quick view similar to that in **Figure 5-26** will be displayed. If you click anywhere on the current window other than on the quick view it will disappear. The quick view will contain data specific to the currently selected row of the listview.

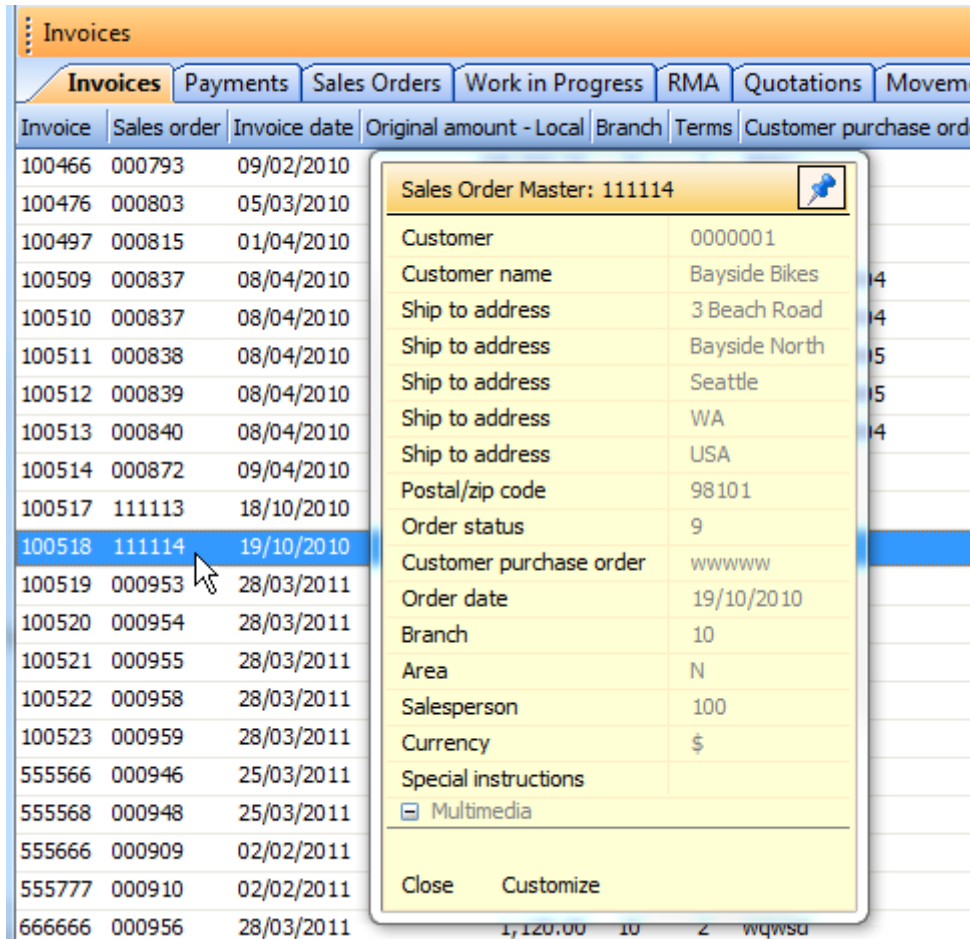
Sales Order Master: 000815 	
Customer	0000001
Customer name	Bayside Bikes
Ship to address	3 Beach Road
Ship to address	Bayside
Ship to address	North
Ship to address	
Postal/zip code	
Order status	9
Customer purchase order	BB 809
Order date	01/04/2010
Branch	10
Area	N
Salesperson	100
Currency	\$
Special instructions	
 Multimedia	
Close    Customize	

**Figure 5-26:** The *Quick View* for a sales order

You can drag the quick view to a new location by clicking on the titlebar and dragging it. As you drag it the border will change to appear like a window. If you want the quick view to remain in this location you can pin it using the pin on the titlebar. When you click on another row in the listview, the quick view is populated with information for the sales order associated with this row. **Figure 5-27** shows the sales order quick view after it has been moved and pinned in location. As the row containing sales order 111114 is selected, the information in the quick view is changed to reflect this. The quick view can be closed using the *Close* button at the bottom of the window.

Fields from the sales order master table can be added or removed from the quick view using the *Customize* button. **Figure 5-28** shows the *Quick View Definition* screen, where you define which fields are displayed in the quick view. On the left is the *Available data dictionary columns* listview, and on the right is the *Selected columns* listview. The selected columns listview shows the column name and description of each of the fields that is currently selected to be displayed.

Fields can be removed from the selected columns listview by highlighting the row and selecting the *Remove* button.

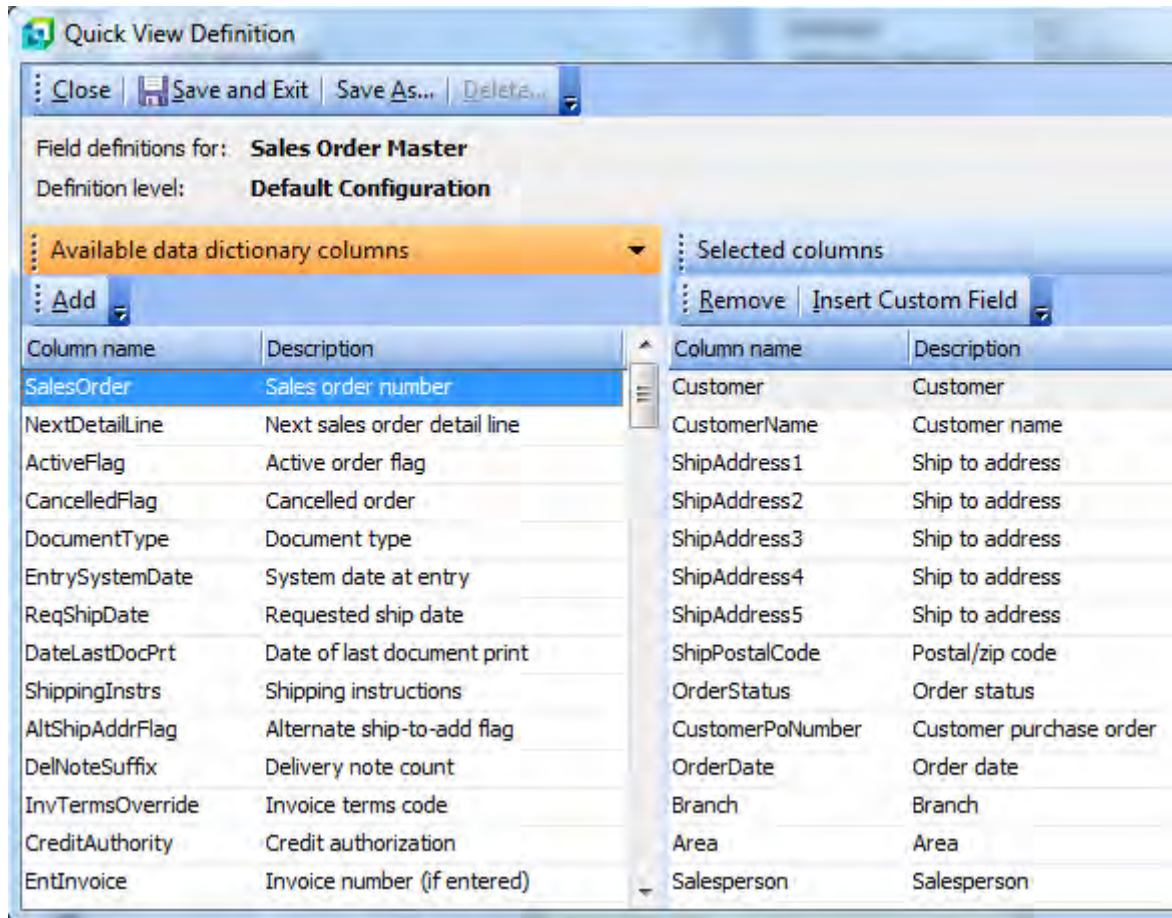


**Figure 5-27:** The quick view pinned in place

Custom form fields can be added to the selected columns listview using the *Insert Custom Field* button, which displays the list of custom form fields that have been defined against the sales order master table. The custom form fields are inserted using the *Insert* button. Custom form fields that appear in the selected columns listview will have an icon against them to show that they are custom form fields.

To add a field from the *Available data dictionary columns* listview, highlight it and click the *Add* button. The field will be added to the end of the selected columns listview.

The fields will be displayed in the quick view in the sequence that the rows appear in the selected columns listview. The rows can be re-sequenced by highlighting one and dragging it up or down through the listview.

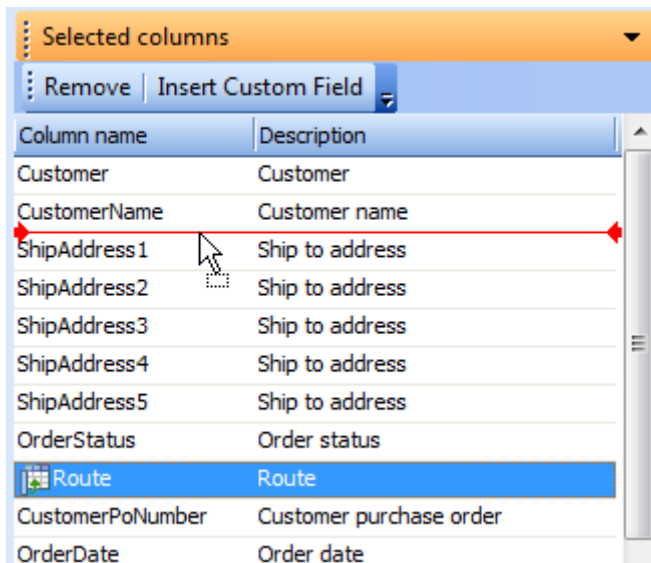


**Figure 5-28:** The *Quick View Definition* screen

**Figure 5-29** shows that the custom form field *Route* has been added to the selected columns listview, which can be seen by the custom form icon alongside it. The *Route* row is in the process of being dragged to just below the *CustomerName* row, as can be seen by the red line with two arrows indicating where it will be placed if the mouse button is released.

Once you have only the fields that you require in the selected columns form, you use the *Save and Exit* button from the toolbar. You can specify that this quick view is to be saved system-wide, for a

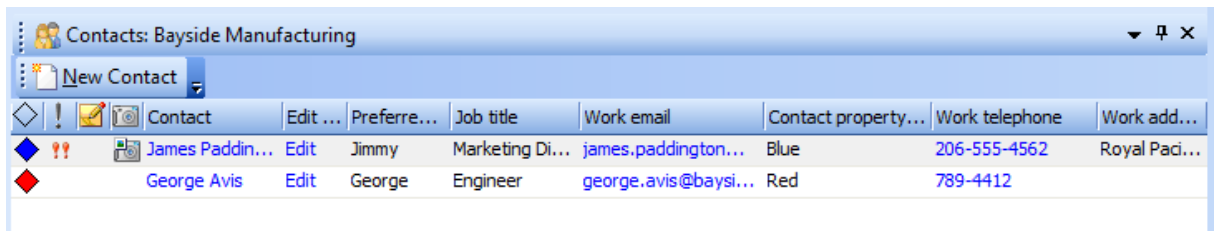
specific company, for a specific group, or for a specific operator. This is done using the *Save As* button and following the wizard.



**Figure 5-29:** Moving the *Route* row to below the *CustomerName* row

## Multi-line Layout and Multi-line Header

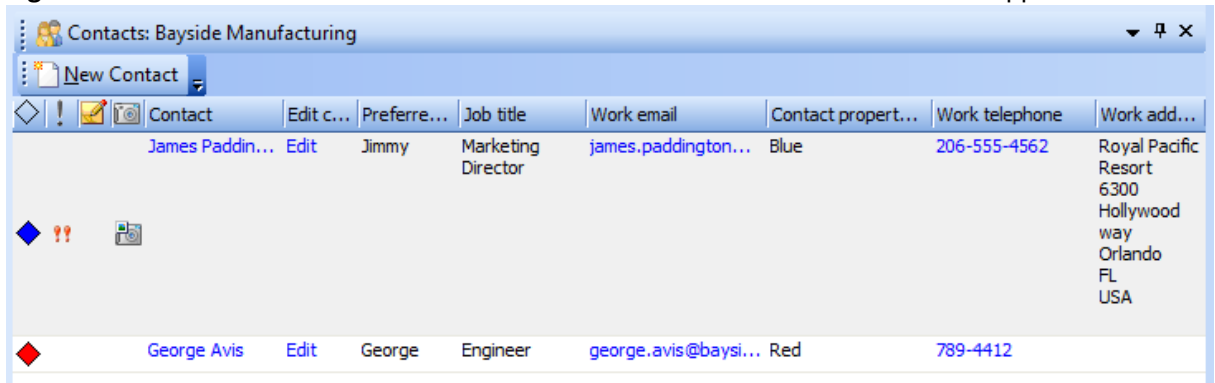
The *Multi-line Layout* and *Multi-line Header* options perform the same task, just that one works with the column header and the other works with the data in the cells of the column. These options allow the column header and content of the cell to extend over several lines. **Figure 5-30** shows the *Contacts* listview in the *Contact Query*. Several of the column headings have been truncated because there is not enough room for the full heading as well as the data in the *Job Title* and *Work Address* columns.



**Figure 5-30:** The *Contacts* listview of the *Contact Query* with truncated headings and values

Setting the *Multi-line Layout* option allows the data in the columns to wrap around, where relevant.

**Figure 5-31** shows that the data in the *Job Title* and *Work Address* columns have wrapped around.



Contact	Edit c...	Preferre...	Job title	Work email	Contact propert...	Work telephone	Work add...
James Paddin...	Edit	Jimmy	Marketing Director	james.paddington...	Blue	206-555-4562	Royal Pacific Resort 6300 Hollywood way Orlando FL USA
George Avis	Edit	George	Engineer	george.avis@baysi...	Red	789-4412	

**Figure 5-31:** The *Contacts* listview with the *Multi-line Layout* option selected

The *Multi-line Header* option allows the text in the column header to wrap around. When this option is selected, the *Multi-line Layout* option is also selected and greyed-out. **Figure 5-32** shows the same query with the *Multi-line Header* option enabled, which means that the *Multi-line Layout* option is also enabled. The *Edit contact*, *Preferred name*, *Contact property message*, and *Work address* column headings wrap around.



Contact	Edit contact	Preferred name	Job title	Work email	Contact property message	Work telephone	Work address
James Paddin...	Edit	Jimmy	Marketing Director	james.paddington...	Blue	206-555-4562	Royal Pacific Resort 6300 Hollywood way Orlando FL USA
George Avis	Edit	George	Engineer	george.avis@baysi...	Red	789-4412	

**Figure 5-32:** The *Contacts* listview with the *Multi-line Header* option selected

## Filter By Column

The *Filter By Column* option is available from the context-sensitive menu that appears when you right-click on the column header. It can be toggled on/off using this option. When selected, it inserts an area between the column header and the listview cells. When the area immediately below the column

header is selected, a dropdown list is displayed containing the option *(All)* and one of each entry currently in this column. In **Figure 5-33**, the area immediately beneath the *Period* column heading has been clicked. The dropdown list contains one of each entry in this column. If there are two cells in this column containing the value *2009/07*, there will only be one occurrence of this in the dropdown list.

Date	Type	Warehouse	Period	Ref/invoice	Trn type	Quantity	Transaction value	Customer	Suppl
14/06/2008	Inv	E	2009/01	000000059	Rec	500.000	175,000.00	000000	
25/06/2008	Sale	E	2009/02	800053	Cre	-100.000	-35,000.00	0000004	
08/07/2008	Sale	E	2009/03	100319	Inv	50.000	17,500.00	0000006	
22/07/2008	Inv	E	2009/05	000000063	Rec	300.000	105,000.00	000000	
09/08/2008	Sale	E	2009/06	100327	Inv	100.000	35,000.00	0000006	
23/08/2008	Inv	E	2009/07	000000073	Rec	150.000	52,500.00	000000	
09/09/2008	Sale	E	2009/08	100333	Inv	100.000	35,000.00	0000004	
09/09/2008	Sale	E	2009/07	100334	Inv	100.000	35,000.00	0000006	
20/09/2008	Inv	F	2009/07	000000082	Rec	500.000	175,000.00	000000	

**Figure 5-33:** Using the *Filter By Column* option, the dropdown list contains one of each value in the selected column

Date	Type	Warehouse	Period	Ref/invoice	Trn type	Quantity	Transaction value	Customer	Suppl
<b>2009/07</b>									
09/09/2008	Sale	E	2009/07	100333	Inv	100.000	35,000.00	0000004	
09/09/2008	Sale	E	2009/07	100334	Inv	100.000	35,000.00	0000006	
20/09/2008	Inv	E	2009/07	000000082	Rec	500.000	175,000.00	000000	
09/09/2008	Sale	N	2009/07	100330	Inv	500.000	175,000.00	0000001	
09/09/2008	Sale	N	2009/07	100331	Inv	100.000	35,000.00	0000002	

**Figure 5-34:** Only rows matching the entry in the *Filter By Column* section are displayed

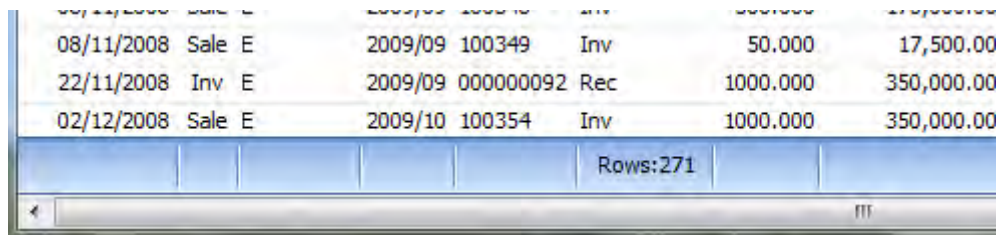


When one of the options is selected, this value appears in the *Filter By Column* section. Only rows that match the value in the selected column are displayed (see **Figure 5-34**). When using the *Filter By Column* option you can only select one column at a time. If another column is selected, the original selection criterion is cleared and only the new selection criterion is used.

If you intend changing the column to be filtered, it is advisable to reset the existing selection criteria to (*All*) before selecting the new column. This is because the dropdown list for the new column will only contain entries that are currently in the column, and this may have been restricted by the previous selection criterion.

## Autosum

The list of available *Autosum* options is conditional on the content of the currently highlighted column. The available options are: *Column Sum*, *Column Average*, *Row Count*, *Group Total*, and *Remove All*. For columns containing non-numeric values, the two options that are available are: *Row Count* and *Remove All*. The *Remove All* option removes any autosum settings that have been made on the listview for all columns, not just the currently highlighted one. The *Row Count* option is set per column and displays the total number of rows in the listview in the totals section at the bottom of the listview. **Figure 5-35** shows the *Row Count* set against the *Trn type* column of the listview that appears in **Figure 5-34**.



08/11/2008	Sale	E	2009/09	100349	Inv	50.000	17,500.00
22/11/2008	Inv	E	2009/09	000000092	Rec	1000.000	350,000.00
02/12/2008	Sale	E	2009/10	100354	Inv	1000.000	350,000.00
						Rows:271	

**Figure 5-35:** The *Row Count* option set against the *Trn type* column of the *Movements* listview

Some listviews can have multiple levels of information, such as in the *Customization Management* program. In this case, the displayed number of rows reflects the number of rows of the first level items only. **Figure 5-36** shows the *Customization Management* screen. At the highest level there are two items (*Asset Manager* and *AAA*) so the displayed row count is two.

For columns containing numeric values you can specify that the total contains the *Row Count*, the *Column Sum*, or the *Column Average* (See **Figure 5-37**). The *Column Sum* is the sum of all the values in this column. The *Column Average* is the sum of all the values in the column divided by the row count.

If the listview is being grouped by a column (see the *Group By* section above) the *Group Totals* option becomes available. If the *Group Totals* option is set against a column, it affects the whole listview and adds a *Subtotal* row between the end of one group and the start of the next one. Any columns that contain a *Row Count*, *Column Sum* or *Column Average* will have subtotals displayed in this row.

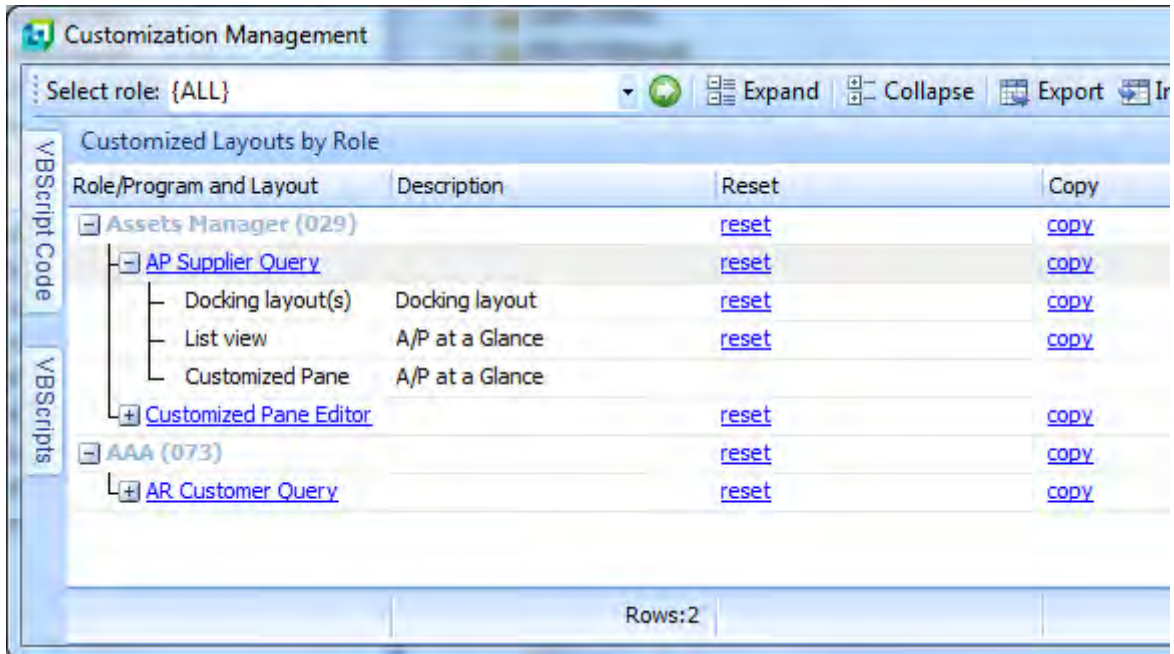


Figure 5-36: The row count displays the number of rows of the highest level item

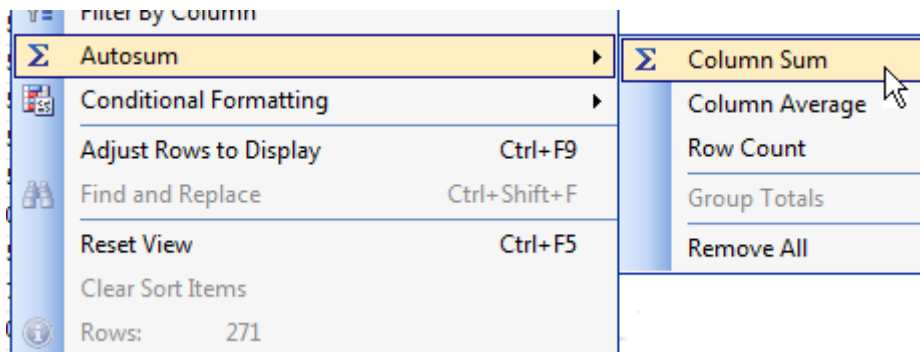


Figure 5-37: The available *Autosum* options for a column containing numeric values

**Figure 5-38** shows the subtotal section being displayed because the *Group Total* option was selected for this listview. The *Ref/Invoice* column has the *Row Count* set, so displays the total number of rows in the totals section and the number of rows for this period in the subtotal section. The *Quantity* column has the *Column Sum* set against it, so displays the total number in the totals section and the total number for this period in the subtotal section.

Date	Type	Warehouse	Ref/Invoice	Trn type	Quantity	Transaction value	Customer	Supplier	Unit cost	Unit price/new cost	Sale amount	Sales order
15/03/2008	Inv	S	000000037	Rec	250.000	87,500.00		0000001	350.00000	350.00000		
20/03/2008	Sale	S	100291	Inv	50.000	17,500.00	0000003		350.00000	560.00000	28,000.00	000652
<b>Subtotal:</b>			<b>8</b>		<b>2,400.000</b>							
Period: 2009/02												
19/04/2008	Sale	E	100295	Inv	50.000	17,500.00	0000006		350.00000	560.00000	28,000.00	000659
26/04/2008	Sale	E	100297	Inv	200.000	70,000.00	0000004		350.00000	560.00000	112,000.00	000658
26/04/2008	Sale	E	100302	Inv	200.000	70,000.00	0000004		350.00000	560.00000	112,000.00	000661
29/04/2008	Inv	E	000000046	Rec	500.000	175,000.00		0000001	350.00000	350.00000		
19/04/2008	Sale	N	100293	Inv	250.000	87,500.00	0000001		350.00000	560.00000	140,000.00	000655
19/04/2008	Sale	N	100294	Inv	100.000	35,000.00	0000002		350.00000	560.00000	56,000.00	000656
22/04/2008	Sale	N	100299	Inv	50.000	17,500.00	0000001		350.00000	560.00000	28,000.00	000662
26/04/2008	Inv	N	000000042	Rec	500.000	175,000.00		0000001	350.00000	350.00000		
26/04/2008	Sale	S	100296	Inv	50.000	17,500.00	0000003		350.00000	560.00000	28,000.00	000657
26/04/2008	Sale	S	100300	Inv	50.000	17,500.00	0000003		350.00000	560.00000	28,000.00	000660
29/04/2008	Inv	S	000000045	Rec	250.000	87,500.00		0000001	350.00000	350.00000		
<b>Subtotal:</b>			<b>11</b>		<b>2,200.000</b>							
			Rows: 271	Total: 102,466.000								

**Figure 5-38:** The *Group Total* option displaying the subtotals

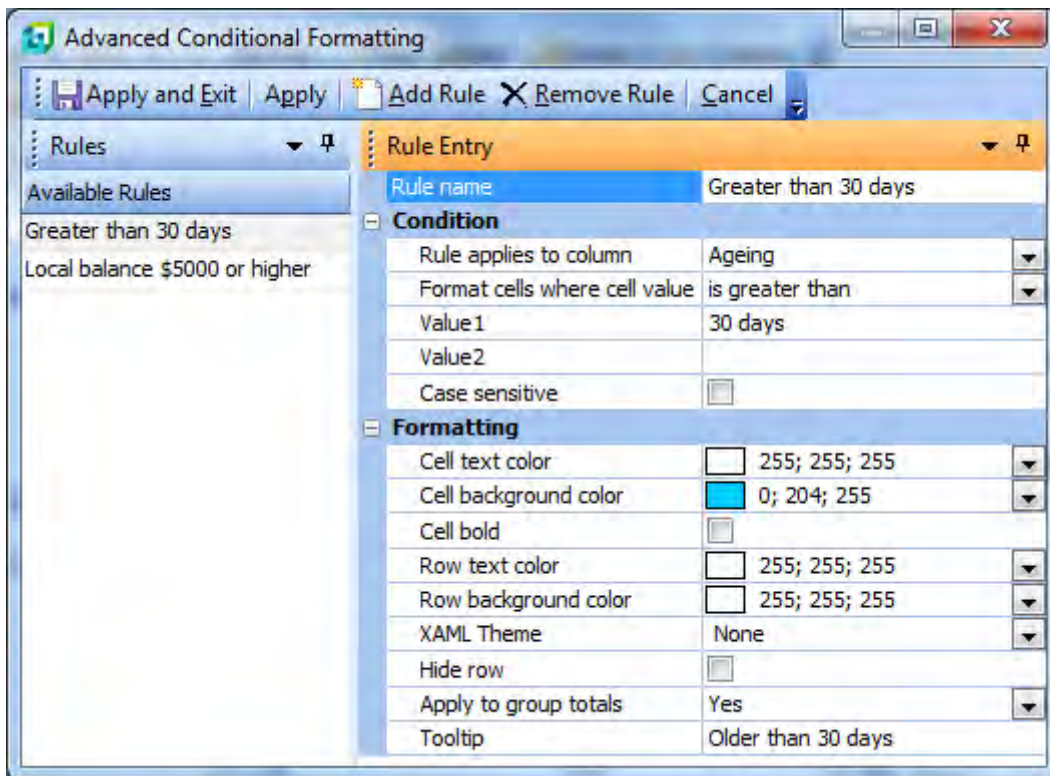
## Conditional Formatting

The *Conditional Formatting* option is available from the context-sensitive menu that appears when you right-click on the column header. It provides two pre-defined conditions and allows the creation of up to 10 custom conditions per listview. The two pre-defined conditions are available for numeric and date columns only.

For a numeric column, *Top 10* refers to the 10 highest unique values and will display these in green with a yellow background. For example, if three rows contain the same value and this value is one of the top 10 values, 12 rows will be highlighted. For a date column, *Top 10* refers to the latest 10 unique dates and these are displayed in the same color as the numeric values.

*Bottom 10* refers to the lowest 10 unique numeric values or oldest dates and these are displayed in red with a pink background. You can have any combination of columns configured to display *Top 10/Bottom 10*. However, a column can only be set to display either *Top 10* or *Bottom 10*; not both.

The custom conditions are configured using the *Advanced* option. The *Advanced Conditional Formatting* screen enables the creation of 10 custom conditions for this listview, known as *Rules*. Each rule can have its own description to make it easier to understand what this rule does. Within the *Condition* group, the *Rule applies to column* caption has a dropdown containing all the columns for this listview. The *Format cells where cell value* caption has a dropdown with conditions such as *is greater than* and *equals to*. Against *Value 1* you specify the value to be compared and for conditions such as *is between*, you put a second value against *Value 2*. If you are performing comparisons with alpha values you can specify whether the check is case-sensitive (i.e. it is checking *A100* against *A100*, or if *a100* will do).



**Figure 5-39:** Configuring the *Advanced Conditional Formatting* screen

The *Formatting* group specifies what should happen if this condition is met. This can be as simple as setting the cells text color, background color, or putting its text in bold. Alternatively, the text/background color can be changed for the whole row. **Figure 5-39** shows two conditions. After using the *Apply and Exit* button the listview is updated accordingly. **Figure 5-40** shows the conditional formatting has been applied. Moving the mouse pointer over one of these highlighted values displays the *Tooltip*.

Balance - Local	POD date	POD reference	Due date	Original amount - Local	Ageing
1,680.00			27/05/2011	1,680.00	30 days
1,120.00			24/05/2011	1,120.00	30 days
13,440.00			24/05/2011	13,440.00	30 days
5,600.00			03/04/2011	5,600.00	90 days
24,525.00			03/04/2011	24,525.00	90 days
1,120.00			27/05/2011	1,120.00	30 days
1,120.00			27/05/2011	1,120.00	30 days
1,120.00			27/05/2011	1,120.00	30 days
560.00			19/12/2010	560.00	90 days
-86.00			07/06/2010	-86.00	90 days
250.00			07/06/2010	250.00	90 days
-2,500.00			30/05/2010		90 days

**Figure 5-40:** The *Movements* listview of the *Customer Query* reflecting the conditional formatting

The *XAML Theme* option has a dropdown list of the standard XAML themes. You can design others yourself. If one of the standard ones is selected it will be applied when the condition is met. If the *Hide row* option is checked, columns that match the condition will be excluded from the listview.

The *Apply to group totals* option is only relevant if the *Group By* option is in use for this listview. The dropdown list against this option contains *Yes*, *No*, and *Only*. In **Figure 5-39**, the second rule is *Local balance \$5000 or higher*, which is applied to the *Balance – Local* column. **Figure 5-41** shows the *Balance – Local* column in the listview to which this rule relates.

If the *Apply to group totals* option is set to *Yes*, the values in this column that are greater than \$5000 (which are \$448,000.00, \$914,000.00, and \$584,800.00) as well as the subtotal value of \$54,205.00 would all appear in red, as they match the condition. If the option is set to *No*, only the values in this column that are greater than \$5000 will appear in red, and not the subtotal. If the option is set to *Only*, then only the subtotals in this column that are greater than \$5000 will appear in red, and not the individual values. The latter is reflected in **Figure 5-41**.

Invoice	Sales order	Original amount - Local	Customer purchase order	Balance - Local	POD date	POD ref
666667	000957	1,120.00	sqwss	1,120.00		
678945	000952	1,120.00	AQWAS	1,120.00		
<b>Subto...</b>				<b>54,205.00</b>		
<input type="checkbox"/> Invoice date: Older						
100466	000793	448,000.00	BB801	448,000.00	08/04/2010	D10027
100476	000803	914,000.00	BB 805	914,000.00		
100497	000815	584,800.00	BB 809	584,800.00		
100509	000837	2,110.00	N900101-2004	2,110.00		
				Total:2,025,628.05		

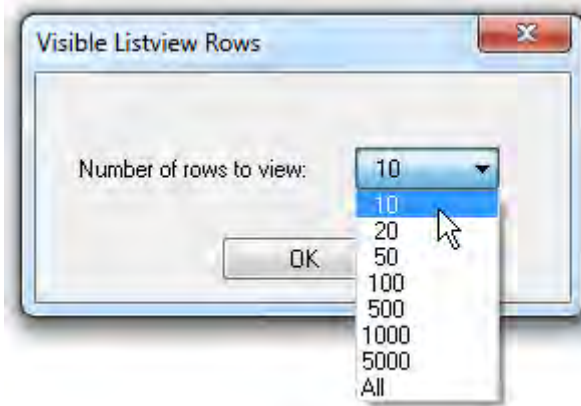
**Figure 5-41:** The *Balance – Local* column with the *Apply to group totals* set to *Only*

The *Remove All* option removes all the *Top 10/Bottom 10* conditional formats, but does not affect any custom conditional formats that have been defined.

## Adjust Rows to Display

The *Adjust Rows to Display* option is available on the context-sensitive menu, and is used to specify how many rows must appear in the listview by default. When selected, the *Visible Listview Rows* screen appears. This can also be accessed using the shortcut keystrokes: *Ctrl + F9*. Not all listviews have the *Adjust Rows to Display* option.

The *Visible Listview Rows* screen has a dropdown list containing the values *10, 20, 50, 100, 500, 1000, 5000*, and *All* (see **Figure 5-42**). If you have specified to see less than the total number of entries in the listview, you can see more entries using *the More Lines* button that appears on the optional listview toolbar. Most queries have a *Preferences* option on the main toolbar so that you can specify the sequence of the display (such as ascending or descending).



**Figure 5-42:** *Visible Listview Rows* screen showing available options

## Clear Sort Items

The *Clear Sort Items* option that is available from the context-sensitive menu is only available if the listview has been sorted by clicking on one of the column headings. When the *Clear Sort Items* option is used it removes the sort icon against the column header on which the column was sorted. The data that is already displayed is not affected. The next time that data is displayed in this listview, it will appear in the default sequence.

## Reset View

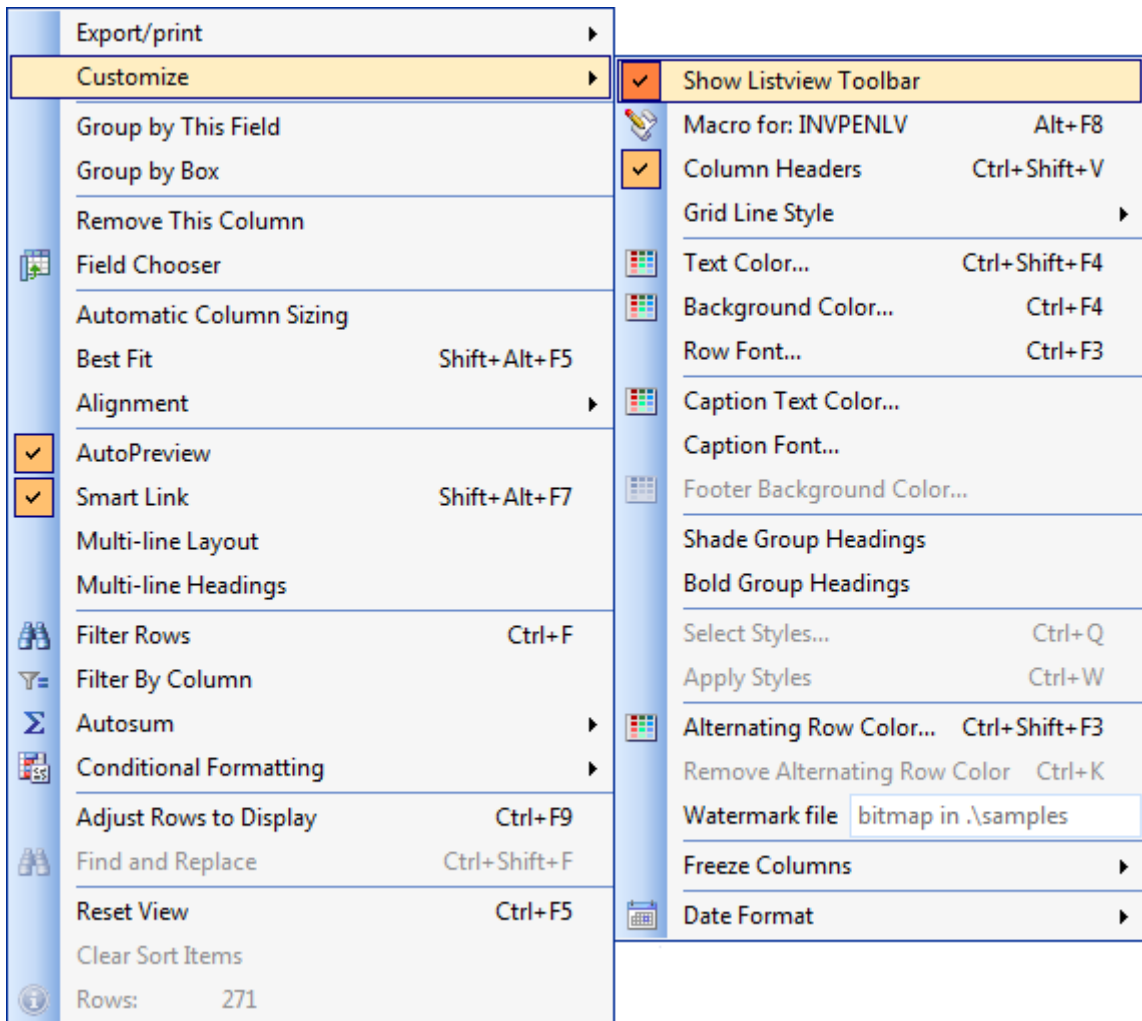
The *Reset View* option sets the listview back to its default settings. This includes items such as the default column sequence, default column width, sorting by column, grouping, removing/replacing columns that have been added/removed. However, it does not include conditional formatting, the number of rows to display, font size changes and filtering by column.

## Customize

The *Customize* option of the context-sensitive menu that appears when you right-click on the column header contains information to change the way that the data appears. **Figure 5-43** shows the options that are available when *Customize* is selected. The first option is *Show Listview Toolbar* (this topic has already been discussed).

The *Macro for:XXXXXXXX* option is the access point for adding/maintaining/removing VBScript against this listview. The XXXXXXXX will be replaced by the unique name for this listview, made up of the six

character program name and a two character identifier. In the **Figure 5-43** this is *INVPENLV*. VBScripting is not be covered in this document.



**Figure 5-43:** Selecting *Customize* shows the available options to change the way that the data appears

The third option is *Column Headers* (the removal/replacement of column headers was covered at the beginning of this chapter).

The fourth option is *Grid Line Style*, which has its own sub-menu(s). You can set a color for the grid lines between the cells. For both horizontal and vertical you can specify that there are no grid lines, or

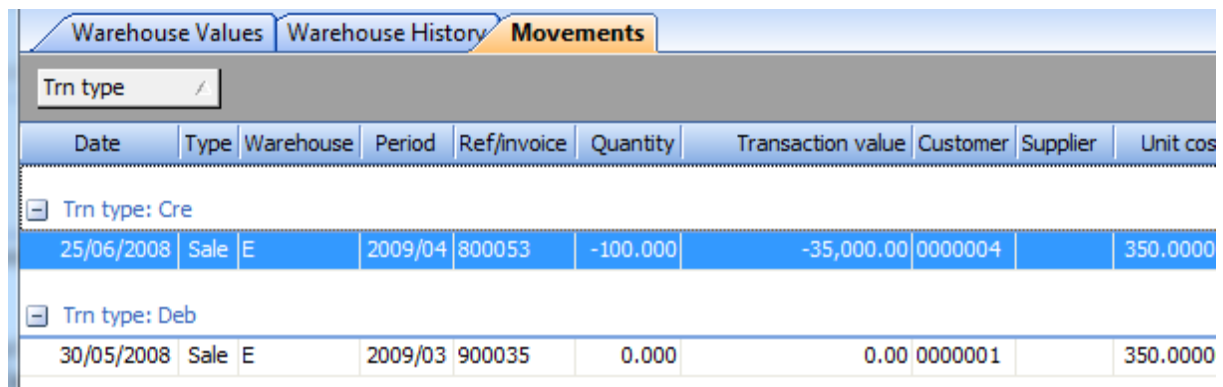


the lines are made up of large/small dots, dashes, or are solid. If you have changed the color of the grid lines the option to use the *Default Grid Line Color* is enabled. If selected, this resets the grid lines back to the default color.

The *Text Color* option displays a color chooser. Using this, you can specify the color of the text within the cells. The *Background Color* option displays the same color chooser so that you can specify the background color of all the cells. The *Row Font* option displays the available font types, styles, and sizes. You can also set the font color within this screen and it will set the *Text Color* option above.

The *Caption Text Color* option displays the same color chooser. Selecting a color here changes the color of the text in the column header. The *Caption Font* option displays a screen to change the font and affects the column header text.

The *Shade Group Headings* and *Bold Group Headings* options can best be explained using images. **Figure 5-44** shows the *Inventory Movements* listview from the *Inventory Query* where the *Group By* has been configured on the *Trn type* column.



The screenshot shows a software interface with three tabs: 'Warehouse Values', 'Warehouse History', and 'Movements'. Below the tabs is a search field containing 'Trn type'. A table with columns: Date, Type, Warehouse, Period, Ref/invoice, Quantity, Transaction value, Customer, Supplier, and Unit cos. is displayed. The data is grouped by 'Trn type'. The first group is 'Cre' (highlighted in blue) with one row: 25/06/2008, Sale, E, 2009/04, 800053, -100.000, -35,000.00, 0000004, 350.0000. The second group is 'Deb' (highlighted in white) with one row: 30/05/2008, Sale, E, 2009/03, 900035, 0.000, 0.00, 0000001, 350.0000.

Date	Type	Warehouse	Period	Ref/invoice	Quantity	Transaction value	Customer	Supplier	Unit cos
Trn type: Cre									
25/06/2008	Sale	E	2009/04	800053	-100.000	-35,000.00	0000004		350.0000
Trn type: Deb									
30/05/2008	Sale	E	2009/03	900035	0.000	0.00	0000001		350.0000

**Figure 5-44:** The *Group By* option with no display changes

**Figure 5-45** shows the same listview once both of these options have been checked. The *Shade Group Headings* option adds color to the header of each of the group by sections, in this case a pale blue. The *Bold Group Headings* option puts the header text for each of these group by sections into bold. In **Figure 5-45**, the text *Trn type: Cre* and *Trn type: Deb* appear in bold.

Warehouse Values		Warehouse History		Movements						
Date	Type	Warehouse	Period	Ref/invoice	Quantity	Transaction value	Customer	Supplier	Unit cos	
<b>Trn type: Cre</b>										
25/06/2008	Sale	E	2009/04	800053	-100.000	-35,000.00	0000004		350.0000	
<b>Trn type: Deb</b>										
30/05/2008	Sale	E	2009/03	900035	0.000	0.00	0000001		350.0000	

**Figure 5-45:** Both the *Shade Group Headings* and *Bold Group Headings* have been checked

The next option is *Alternating Row Color*. This sets the background color of all the cells in rows 2, 4, 6, 8 etc. If you have not configured the *Background Color*, the first row will be white, the second the alternate color, the third will be white, the fourth the alternate color. If the *Background Color* has been set, rows 1, 3, 5, 7 will be in this color, and lines 2, 4, 6, 8 will be in the alternate color. **Figure 5-46** shows the *Movements* listview of the *Inventory Query* with the *Background Color* set to a light color, and the *Alternate Row Color* set to a darker color.

If the *Alternate Row Color* has been set, the *Remove Alternate Row Color* option is enabled. If selected, this removes the alternate row color.

Warehouse Values		Warehouse History		Movements						
Date	Type	Warehouse	Period	Ref/invoice	Trn type	Quantity	Transaction value	Customer	Supplier	
15/03/2008	Inv	E	2009/01	000000038	Rec	500.000	175,000.00		0000001	
18/03/2008	Sale	E	2009/01	100289	Inv	50.000	17,500.00	0000006		
20/03/2008	Sale	E	2009/01	100292	Inv	200.000	70,000.00	0000004		
19/04/2008	Sale	E	2009/02	100295	Inv	50.000	17,500.00	0000006		
26/04/2008	Sale	E	2009/02	100297	Inv	200.000	70,000.00	0000004		
26/04/2008	Sale	E	2009/02	100302	Inv	200.000	70,000.00	0000004		
29/04/2008	Inv	E	2009/02	000000046	Rec	500.000	175,000.00		0000001	
17/05/2008	Inv	E	2009/03	000000051	Rec	500.000	175,000.00		0000001	

**Figure 5-46:** The *Background Color* set to light color and the *Alternating Row Color* option enabled and set to a darker color

The *Watermark file* option is used to specify a bitmap (.BMP) that will be used as a watermark for the listview. The file name must be supplied with the .bmp suffix, and a file with this name must exist in SYSPRO's `base\samples` folder. **Figure 5-47** shows the *Movements* listview of the *Inventory Query*

where a watermark has been supplied. It is possible to supply a *Background Color* and the watermark will still be visible. However, if an *Alternate Row Color* is applied (that is different from the *Background Color*) the watermark will not show through the alternate row.

Warehouse Values		Warehouse History		Movements							
Date	Type	Warehouse	Period	Ref/Invoice	Trn type	Quantity	Transaction value	Customer	Supplier	Unit cost	Ur
25/10/2008	Inv	E	2009/08	000000083	Rec	100.000	35,000.00		0000001	350.00000	
25/10/2008	Inv	E	2009/08	000000086	Rec	300.000	105,000.00		0000001	350.00000	
29/10/2008	Sale	E	2009/08	100343	Inv	200.000	70,000.00	0000006		350.00000	
08/11/2008	Sale	E	2009/09	100348	Inv	500.000	175,000.00	0000004		350.00000	
08/11/2008	Sale	E	2009/09	100349	Inv	50.000	17,500.00	0000006		350.00000	
22/11/2008	Inv	E	2009/09	000000092	Rec	1000.000	350,000.00		0000001	350.00000	
02/12/2008	Sale	E	2009/10	100354	Inv	1000.000	350,000.00	0000004		350.00000	
11/12/2008	Sale	E	2009/10	100355	Inv	1000.000	350,000.00	0000006		350.00000	
11/12/2008	Sale	E	2009/10	100359	Inv	300.000	105,000.00	0000012		350.00000	
16/12/2008	Inv	E	2009/10	000000097	Rec	3000.000	1,050,000.00		0000001	350.00000	
20/12/2008	Inv	E	2009/10	000000100	Rec	3000.000	1,050,000.00		0000001	350.00000	
13/01/2009	Sale	E	2009/11	100368	Inv	50.000	17,500.00	0000012		350.00000	
24/01/2009	Sale	E	2009/11	100370	Inv	50.000	17,500.00	0000006		350.00000	
27/01/2009	Inv	E	2009/11	000000106	Rec	150.000	52,500.00		0000001	350.00000	

Average: 132,336.00      Rows:271

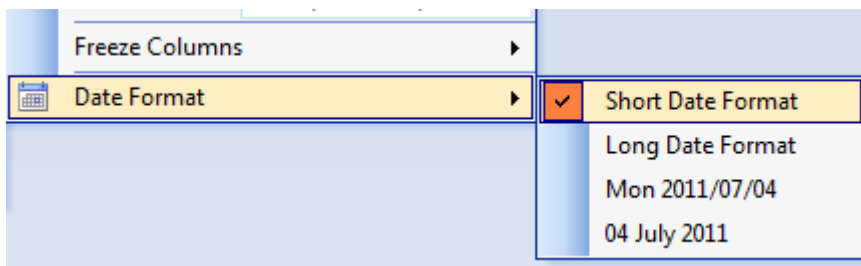
Figure 5-47: A watermark applied to the *Movements* listview

Invoices							
Invoices		Payments	Sales Orders	Work in Progress	RMA	Quotations	Movements
Invoice	Type	Invoice date	Sales order	Customer purchase order	Salesperson	Branch	A
100477	INV	05/03/2010	000804	North 7373	100	10	
100478	INV	05/03/2010	000805	South 568	201	20	
100479	INV	05/03/2010	000806	East 871	300	30	
100486	INV	29/03/2010	000794	North 7369	100	10	
100487	INV	29/03/2010	000795	South 562	201	20	
100488	INV	29/03/2010	000796	East 869	300	30	

Figure 5-48: The *Freeze Columns* option set to three

The *Freeze Columns* option allows the selection of the number of columns, from zero to five. This specifies how many columns in the listview (starting from the left) must remain in position if the right/left scrollbar is used. This is particularly useful when there are many columns in the listview (or where there is limited space) and you need to relate the display back to information in the first row(s). **Figure 5-48** shows the *Invoices* listview from the *Customer Query* program with the *Freeze Columns* option set to three. As the scrollbar at the bottom of the screen is moved towards the right, the first three columns remain in their current location and the columns from four onwards are scrolled.

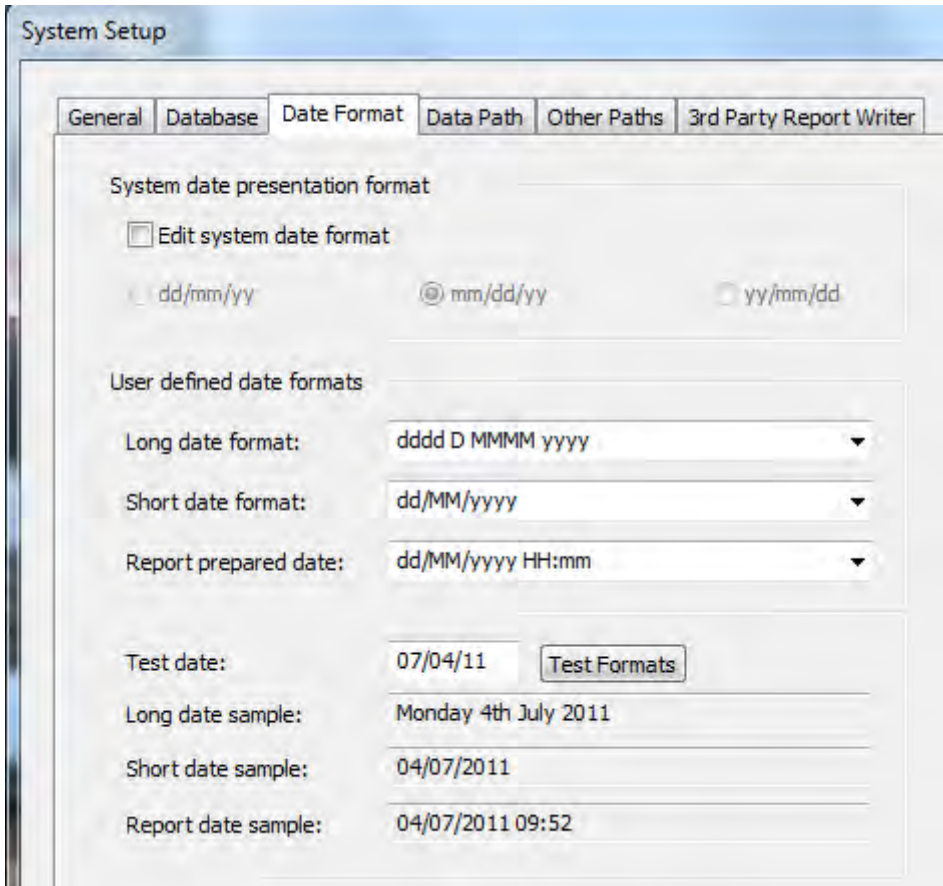
The *Date Format* option allows you to specify how you want to view dates within the listview. There are four options. The first two are descriptions and the second two are displays of how the date will appear. **Figure 5-49** shows the available options, assuming that the date is July 4<sup>th</sup>.



**Figure 5-49:** The available date options for this listview

The *Short Date Format* and *Long Date Format* options display the date in the listview using the SYSPRO date formats configured under SYSPRO's *System Setup* program (see **Figure 5-50**).

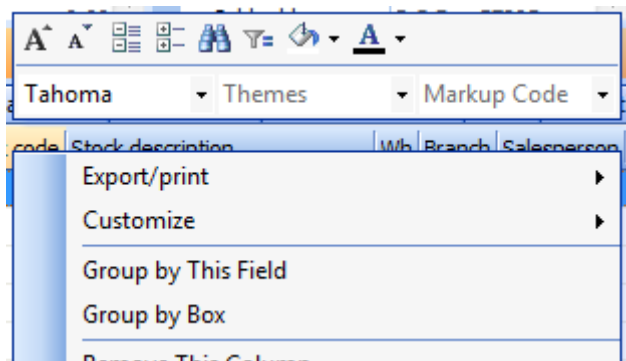
When using some of the date formats you may need to make the relevant date column wider, and as the date columns default to being center-aligned, you may wish to left-align these too.



**Figure 5-50:** The date formats configured under the *System Setup* screen

## Mini Context-Sensitive Menu

When using the context-sensitive menu that appears when you right-click on the column header, a mini menu appears above it. This menu contains buttons to increase/decrease the font size, expand/contract all groups, search, filter columns, colorize the background of the listview, and change the color of the font. In addition, it contains dropdown lists to change the font, apply themes to the listview and apply XAML markup code to the selected column (see **Figure 5-51**).



**Figure 5-51:** The mini context-sensitive menu

The *Themes* option contains a list of names against which are predefined settings for background color, font, font color, font size, etc., which are held in a configuration file. The *Markup Code* option displays a list of XAML files in SYSPRO's `base\samples` folder, the name of which is in the format `FORM_Name.xml`, (and the *Name* portion of the file name is displayed in this dropdown list).

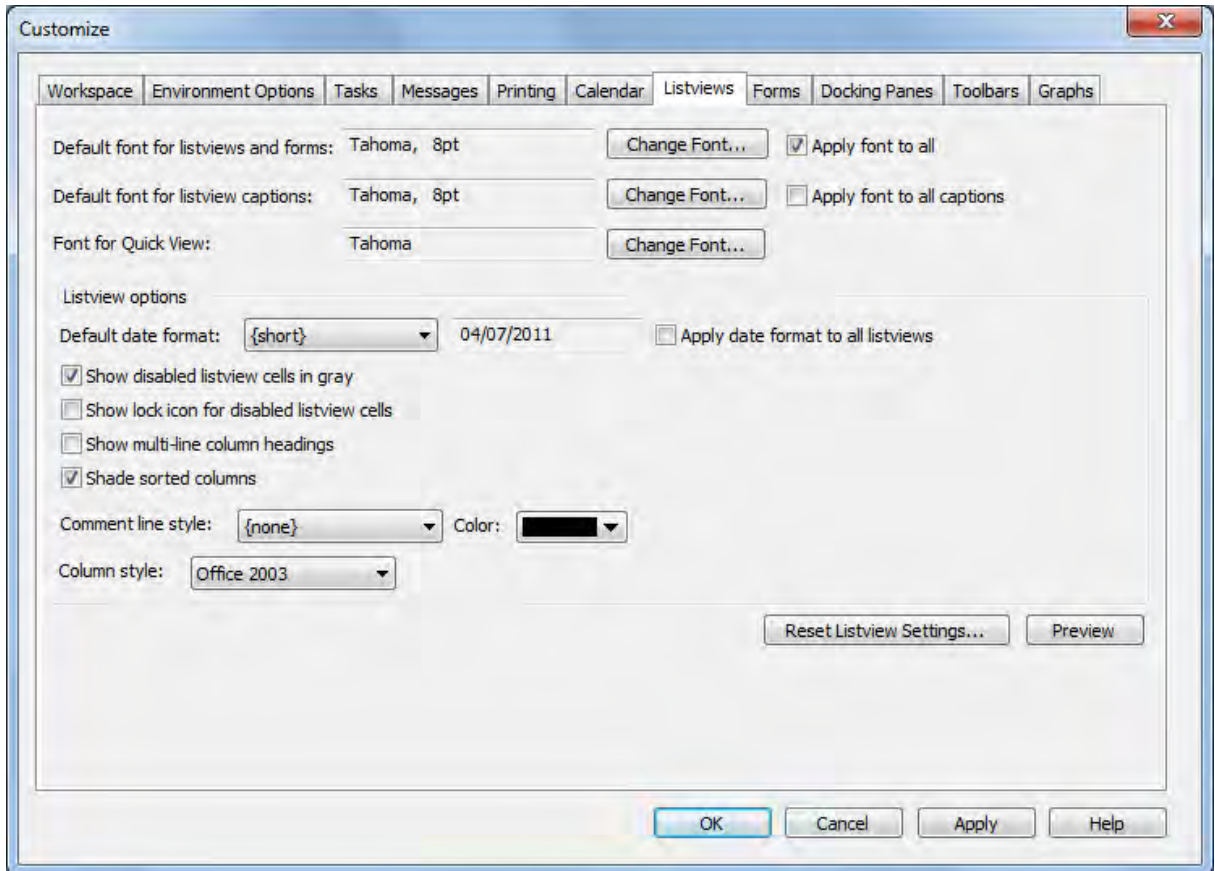
Movements							
Invoice	Type	Invoice date	Stock code	Stock description	Wh	Branch	Salesperson
100288	INV	18/03/2008	A100	15 Speed Mountain Bike Boys	N	10	100
100288	INV	18/03/2008	A101	15 Speed Mountain Bike Girls	N	10	100
100288	INV	18/03/2008	A102	15 Speed Mountain Bike Ladies	N	10	100
100288	INV	18/03/2008	A103	15 Speed Mountain Bike Men	N	10	100
100288	INV	18/03/2008	A200	Bicycle Pump	N	10	100

**Figure 5-52:** The *Graduated16* markup code applied to the Invoice column

The XAML file will contain one or more placeholders for values within its markup code. These are numbered `%1%`, `%2%`, `%3%`, etc., and are replaced by the values in the cell at run time. Unless VBScript code has been added to the listview, each cell will only contain one value, so it will only use the first placeholder (`%1%`). If the XAML markup file requires more than one value (such as those showing charts and trendlines) there is no point in applying the markup code to this column as it will not show a meaningful image. **Figure 5-52** shows the *Graduated16* markup code applied to the *Invoice* column of the *Movement* listview of the *Customer Query*. Although this XAML markup file does contain 16 placeholders (`%1%` to `%16%`) it does not require more than one to display.

## Personalization Settings that Affect Listview

The *Listviews* tab of the *Personalization* program contains many options that affect the way that the content of the listview is displayed. **Figure 5-53** shows the contents of this tab.



**Figure 5-53:** The *Listview*-specific options under *Personalize*

The first option is *Default font for listviews and forms*, and this is used to set a default font for the values of listviews, as well as the captions and values of forms. As programs are run that contain listviews the values in the cells are displayed using this font (if this is the first time that the operator has called up the program). If the listview has been displayed before the the font that was previously used will continue to be used (the font would have been saved in a configuration file for this listview). If the *Apply font to all* checkbox has been checked, all listviews displayed from now will use this font, even if they had previously used and the font saved in the configuration file.

The *Default font for listview captions* (along with the *Apply font to all captions* checkbox) works in the same way for the text in the column header of the listview, as the previous option did for the cell values. The *Font for Quick View* option is used to change the font used in all quickviews, regardless of whether previously displayed.

The *Default date format* option has a dropdown list containing the same options that appear in **Figure 5-49** and is where you define your default. The *Apply date format to all listviews* checkbox works in the same way as described for fonts.

The next two options: *Show disabled listview cells in gray* and *Show lock icon for disabled listview cells*, only relate to data grids, so will be covered under that section.

The *Show multi-line column headings* option allows the text against column headers in all listviews to be split over multiple lines where appropriate. **Figure 5-32** shows an example of this where this option has been configured against a specific listview.

The *Shade sorted columns* option is used to highlight if a listview has been sorted using a column, by changing the background color of this column to pale beige. This is not affected by using the *Background Color* option to change the background color of the listview cells, as this column will continue to appear in pale beige.

The *Comment line style* and *Color* options affect listviews that contain comments. This is to make the comments stand out from the normal data that is being displayed. **Figure 5-54** shows the *Sales Order Query* listview where the *Comment line style* option has been set to Italics, and the *Color* option has been set to orange.

Stock code	Description	Order quantity	Uom	Warehouse
A100	15 Speed Mountain Bike Boys	500.000	EA	N
A101	15 Speed Mountain Bike Girls	500.000	EA	N
A102	15 Speed Mountain Bike Ladies	500.000	EA	N
A200	Bicycle Pump	1500.000	EA	N
SER200	Bicycle Child Seat	200.000	EA	N
	<i>Please remember to send serial certificates</i>			
	<i>with the goods.</i>			

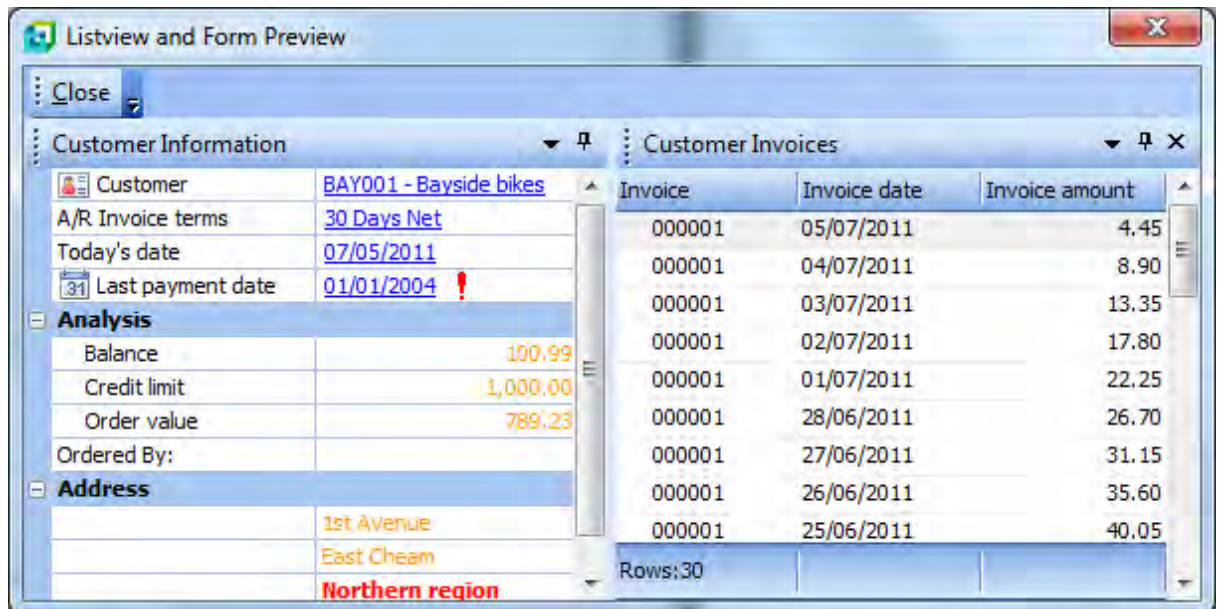
**Figure 5-54:** Displaying comments when the *Comment line style* and *Color* are set



The *Column style* dropdown list contains the entries *Explorer*, *Office 2003* and *Office 2007*. It is used to set the style of the column header section of the listview. **Figure 5-54** shows the column header where this option is set to *Office 2007*.

The *Reset Listview Settings* button is used to remove the layout settings applied to all your listviews and reset them to the default listview layout for your operator code. Selecting this function has no effect on listviews that are customized for a specific role to which your operator code is assigned

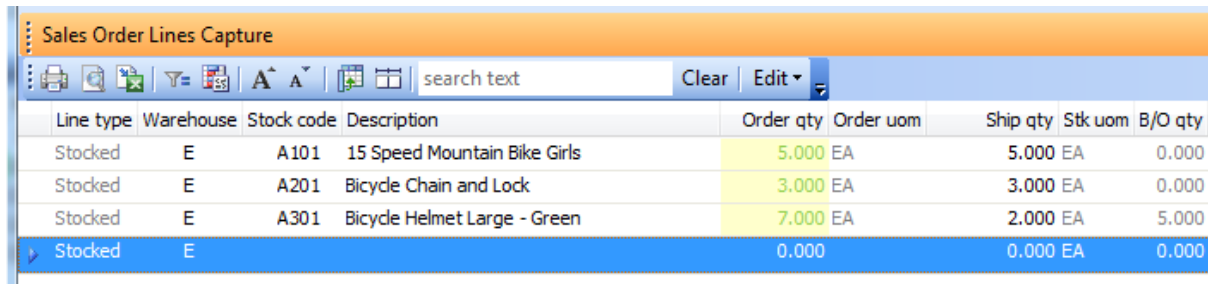
The *Preview* button displays a preview window that contains one form and one listview. This enables you to see the affect that your current listview settings have on a listview before applying them. **Figure 5-55** shows this preview window.



**Figure 5-55:** The preview window

## Data Grids

*Data grids* are similar to listviews in appearance as they have rows, columns and cells. But whereas listviews are used to display data, data grids are used for the quick entry of data. As detail lines are added, only the minimum of data validation is performed. On completion of the data entry, a save or submit button is selected and validation is performed on all of the data. **Figure 5-56** shows a data grid being used for entry of a sales order.



Line type	Warehouse	Stock code	Description	Order qty	Order uom	Ship qty	Stk uom	B/O qty
Stocked	E	A101	15 Speed Mountain Bike Girls	5.000	EA	5.000	EA	0.000
Stocked	E	A201	Bicycle Chain and Lock	3.000	EA	3.000	EA	0.000
Stocked	E	A301	Bicycle Helmet Large - Green	7.000	EA	2.000	EA	5.000
Stocked	E			0.000		0.000	EA	0.000

**Figure 5-56:** A data grid being used to enter sales order information

Most of the options that are available for a listview are also available for a data grid. The exceptions are those options that either restrict the number of rows displayed, or change the sequence of these rows (*Adjust Rows to Display*, *Filter Columns*, *Group by Box*, *Group by This Field*, and the ability to sort by clicking on a column header). Having these options available could affect the integrity of the posting process, so they have been disabled in data grids where new lines are automatically created when you press *Enter*, or *Tab* off the last column of a line. Data grids that are used solely to process import files will allow these.

There are also some options that are available for a data grid that are not available for a listview. These are *Find and Replace*, *Paste (all columns)*, *Paste (visible columns only)* and *Duplicate*. The two paste options can be used in conjunction with the listview/data grid *Copy Selected Records* option, or using information that is already in the Windows clipboard.

## Find and Replace

The *Find and Replace* option enables the operator to find all occurrences of a string within a certain column in a data grid and replace it with another string. The *Find and Replace* option is not available in all data grids. It is selected using either the context-sensitive menu that appears when you right-click on a column header, or using the shortcut keystrokes *Ctrl + Shift + F*. **Figure 5-57** shows the find and replace option directly above the column header. In this example, the operator has incorrectly entered the comment as *Petty Xash*, and is using the find and replace option to replace the *Xash* with *Cash*. Once the *Look for* and *Replace with* options have been populated (and the column has been selected) the *Replace* button is clicked and the change is made.

Not all columns in a data grid can have their values (or parts of their values) changed using the *Find and Replace* option. Using the example in **Figure 5-57**, it is not logical to change the content of the *Description* column as this comes from the information stored against the ledger code. Some data grids have the *Find and Replace* option disabled, as there are no columns that are suitable to be changed.

Journal Details						
Look for: xash		Search in: Comment	Replace with: Cash			
Ledger code	Description	Reference	Debit amount	Credit amount	Comment	
10-6220	Promotions and Shows - East	GGG		2,000.00	Petty Xash	
20-6220	Promotions and Shows - West	GGG		2,000.00	Petty Xash	
30-6220	Promotions and Shows - East	GGG	19/07/2011		600.00	Petty Xash
40-6220	Promotions and Shows - West	GGG	19/07/2011		400.00	Petty Xash
00-1080	Petty Cash	GGG	19/07/2011		5,000.00	Countrywide Promos

Figure 5-57: The *Find and Replace* option

## Copy Selected Records, Paste (all columns), Paste (visible columns only)

The *Copy Selected Records* option is available for both listviews and data grids. It is available from the context-sensitive menu, or using the keystroke shortcut *Ctrl + Alt + F8*. It takes the currently selected row(s) and places them in the Windows clipboard. From here they can be used by both SYSPRO and other products. Figure 5-58 shows the *Copy Selected Records* option in use.

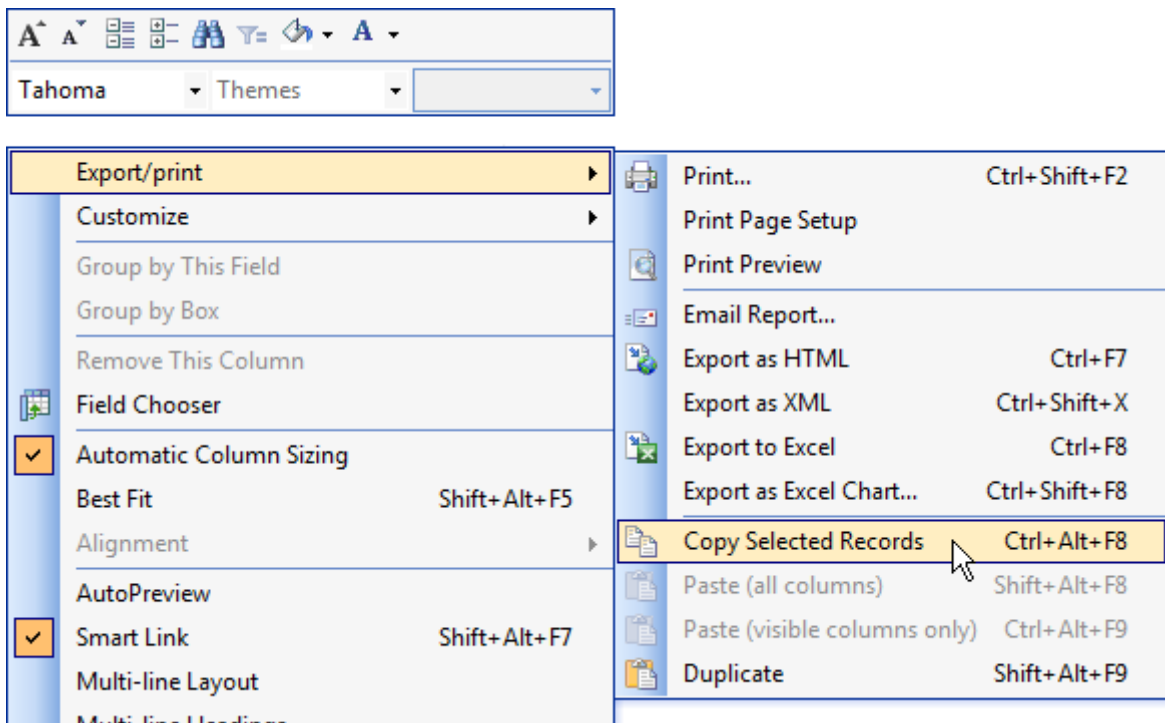


Figure 5-58: Using the *Copy Selected Records* option to populate the Windows clipboard

The selected record was one line from the *Journal Details* data grid of the *Ledger Entries* program (see **Figure 5-59**). The selected row contains eight different cells. The first column (that contains a pointer to show that this is the currently selected row and which appears to the left of the *Ledger Code*) is also included. By default there are another six columns that could appear against this data grid. However, as they have been dragged from the data grid in a similar way to that described in the listview section (and now appear in the *Field Chooser*) they are excluded from the row and are not copied to the clipboard.

Ledger code	Description	Transaction date	Reference	Debit amount	Credit amount	Comment
10-6220	Promotions and Shows - North	19/07/2011	GGG			2,000.00 Petty Cash
20-6220	Promotions and Shows - South	19/07/2011	GGG			2,000.00 Petty Cash
30-6220	Promotions and Shows - East	19/07/2011	GGG			600.00 Petty Cash
40-6220	Promotions and Shows - West	19/07/2011	GGG			400.00 Petty Cash
00-1080	Petty Cash	19/07/2011	GGG	5,000.00		Countrywide Promos

**Figure 5-59:** The selected record

After using the *Copy Selected Records* option, this row is now in the clipboard and available for use by other products. **Figure 5-60** shows this row pasted into Microsoft Excel.

	A	B	C	D	E	F	G	H	I
1		00-1080	Petty Cash	19/07/2011	GGG	5,000.00		Countrywide Promos	
2									
3									

**Figure 5-60:** Pasting the selected row into Microsoft Excel

Data can also be pasted into a data grid from the Windows clipboard. The supplied data must be delimited with *Tab* characters to specify where the columns start/finish. The two paste options that enable you to paste data into the data grid from the Windows clipboard are *Paste (all columns)* and *Paste (current columns only)* and they perform similar tasks. The difference is that with the *all columns* option you must provide data for all the columns that can appear in the data grid, whereas the *current columns only* requires just the columns that currently appear in the data grid, in the sequence that

they currently appear. The shortcut keystrokes for *Paste (all columns)* are *Shift + Alt + F8* and those for *Paste (current columns only)* are *Ctrl + Alt + F9*.

When copying to the clipboard, products such as Microsoft Excel automatically supply the *Tab* characters. **Figure 5-61** shows some general ledger transactions that have been captured in Microsoft Excel. The sequence of columns matches that of the *Journal Details'* data grid that appears in **Figure 5-59**. Column A is empty as it is transposed to the column that shows which line is currently highlighted. Column C is also empty, as the ledger description will be supplied by SYSPRO during the validation phase. The data grid expects to receive dates in the format *CCYY-MM-DD* and the delimiter of "-" can be replaced with other delimiters, or the date can be supplied without delimiters.

	A	B	C	D	E	F	G	H
1		00-6480		2011-07-19		51235		Multi-payment
2		00-1160		2011-07-19		2000		Multi-payment
3		00-2110		2011-07-19		13000		Multi-payment
4		00-6270		2011-07-19		1235		Multi-payment
5		00-6230		2011-07-19		15000		Multi-payment
6		00-6480		2011-07-19		20000		Multi-payment

**Figure 5-61:** Copying to the clipboard from Microsoft Excel

Once the transactions have been copied to the clipboard, the two paste options become available against the data grid. **Figure 5-62** shows the data grid immediately after the *Paste (current columns only)* option has been used. Note that the date in the *Transaction Date* column has been changed automatically to the current SYSPRO format; that the *Description* is still empty; and the values are not formatted.

When the *Save* button is used to save the contents of the data grid, validation is performed on all the data. **Figure 5-63** shows that the content of the *Ledger code* column has been validated and the matching *Description* displayed. The values have also been formatted.

Ledger code	Description	Transaction date	Reference	Debit amount	Credit amount	Comment
00-6480		19/07/2011			51235	Multi-payment
00-1160		19/07/2011				2000 Multi-payment
00-2110		19/07/2011				13000 Multi-payment
00-6270		19/07/2011				1235 Multi-payment
00-6230		19/07/2011				15000 Multi-payment
00-6480		19/07/2011				20000 Multi-payment

Figure 5-62: Using the *Paste (current columns only)* option to populate the data grid

Ledger code	Description	Transaction date	Reference	Debit amount	Credit amount	Comment
00-6480	Legal Fees	19/07/2011		51,235.00		Multi-payment
00-1160	Employee Loans	19/07/2011			2,000.00	Multi-payment
00-2110	Subcontracting	19/07/2011			13,000.00	Multi-payment
00-6270	Magazine Subscription	19/07/2011			1,235.00	Multi-payment
00-6230	Promotions Issues - Specials	19/07/2011			15,000.00	Multi-payment
00-6480	Legal Fees	19/07/2011			20,000.00	Multi-payment

Figure 5-63: After the validation has been performed

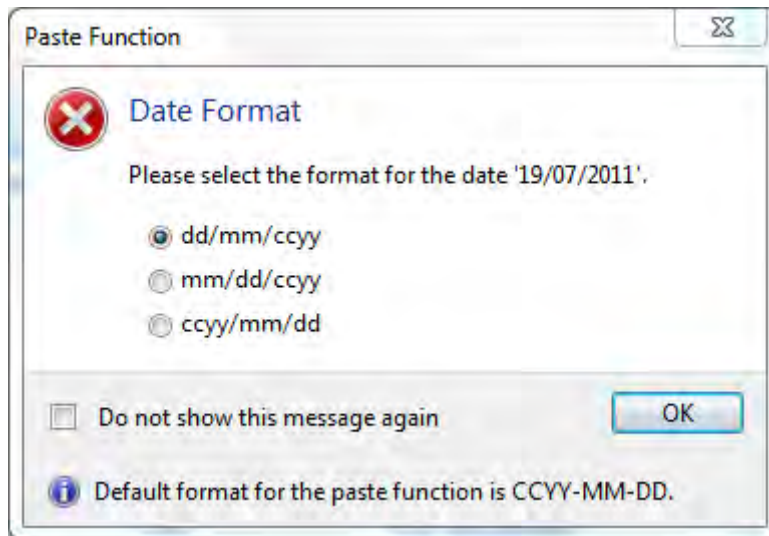
The screenshot shows the Microsoft Excel interface with the following data in the grid:

	A	B	C	D	E	F	G	H
1		00-6480		19/07/2011		51235		Multi-payment
2		00-1160		19/07/2011			2000	Multi-payment
3		00-2110		19/07/2011			13000	Multi-payment
4		00-6270		19/07/2011			1235	Multi-payment
5		00-6230		19/07/2011			15000	Multi-payment
6		00-6480		19/07/2011			20000	Multi-payment

Figure 5-64: Copying a date in the incorrect format

If one or more of the pasted values fails validation then all the validation fails. A message highlighting the first failed item is displayed and the cursor placed on this item. If a date is copied to the clipboard in a format other than that mentioned above, during the pasting process a warning message is displayed. **Figure 5-64** shows the same Excel spreadsheet as seen above, but with the date in the format DD/MM/CCYY.

When the paste option is used and a date is not in the correct format, a screen is displayed that requests the operator to specify the format of the supplied date (see **Figure 5-65**). In the case of 19/07/2011 it is obvious that the date is in the format DD/MM/CCYY. However, if the supplied date were 06/07/2011 it may not be so obvious. Once the operator has selected the date, they can click the *OK* button to finish posting the record.



**Figure 5-65:** Prompting for the supplied date format

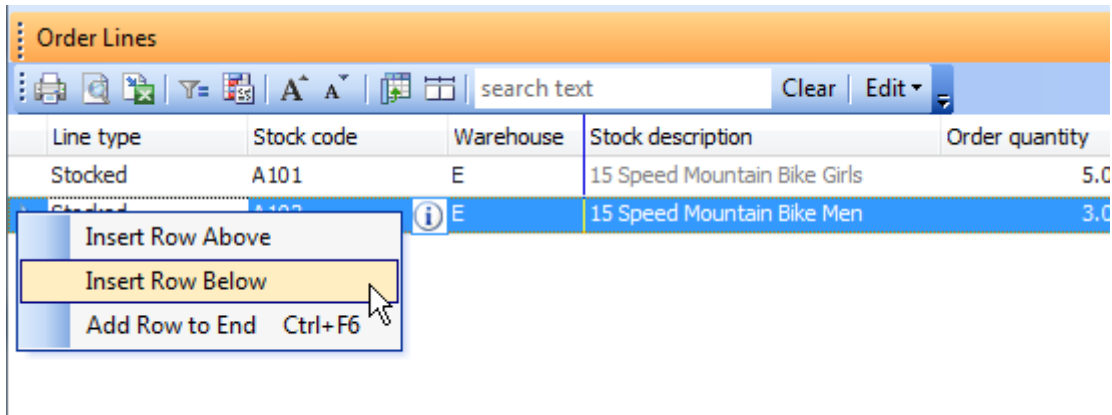
## Duplicate

The *Duplicate* option is available from the context-sensitive menu (or using the shortcut keystrokes *Shift + Alt + F9*) when a row in the data grid is selected. It will add a duplicate copy of the currently selected row to the end of the data grid.

## Adding, Inserting and Deleting Rows

New lines can be added by clicking anywhere along the row directly below what is currently the last one. A new line will also be added if you tab off the last cell of what is currently the last row. If you

want to add a new line when you are positioned anywhere other than after the current last row of the data grid, you can do this by right clicking on the first column and selecting either *Insert Row Above*, *Insert Row Below*, or *Add Row to End* (see **Figure 5-66**).



**Figure 5-66:** Adding/inserting a row

The *Insert Row Above* option inserts the blank row directly above the one that is currently highlighted, the *Insert Row Below* option inserts a blank row directly below the one that is currently highlighted, and the *Add Row to End* option (or *Ctrl +F6* shortcut keystrokes) adds a blank row to the end of the data grid.

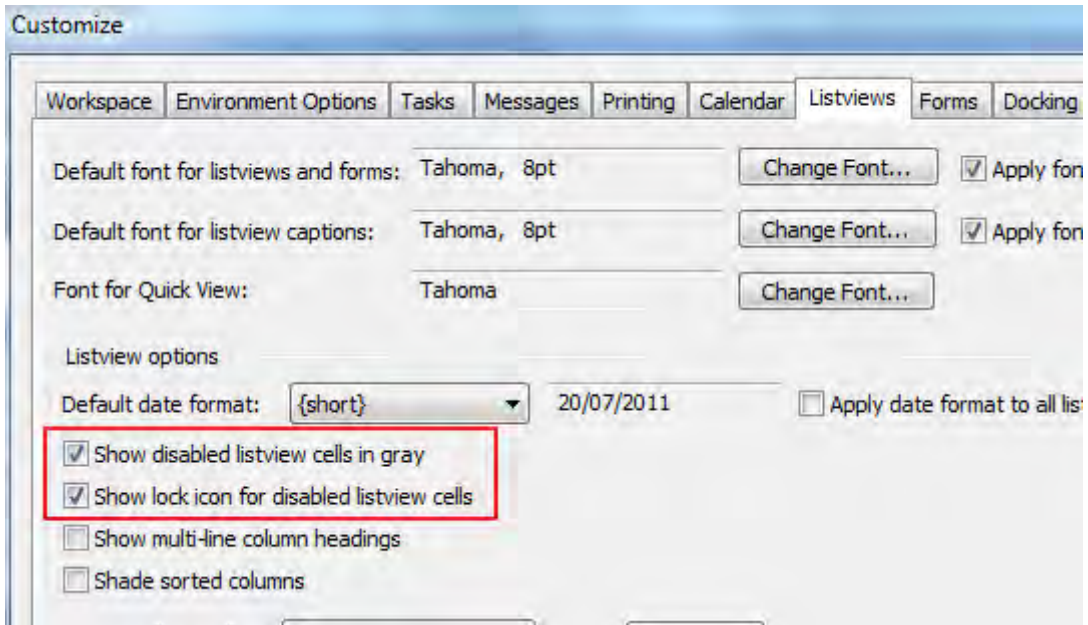
When saving a data grid, all blank lines will be removed automatically. However, if you wish to remove them manually you can do so by clicking on the first cell of the row and pressing the *Del* key. This is also true of non-blank lines.

## Personalize Options that affect Data Grids

All of the options of the *Listview* tab under the *Personalize* program affect data grids. However, two of these options are specific to data grids, so have not been covered previously. They specify how cells are displayed if the operator cannot update cells in this column. These options are: *Show disabled listview cells in gray* and *Show lock icon for disabled listview cells*. **Figure 5-67** shows the two options that affect how cells are displayed if they are disabled.

The *Show disabled listview cells in gray* causes any text in a disabled cell to appear in gray to highlight that it cannot be changed. However, if there is no text in the cell it is not possible to see that the cell cannot be changed.





**Figure 5-67:** Two options that affect how disabled cells are displayed

The *Show lock icon for disabled listview cells* causes a padlock icon to appear against cells that cannot be changed. **Figure 5-68** shows the *Journal Details* data grid of the *Journal Entries* program when both these options have been enabled. The *Description* column is disabled because the ledger code description is picked up from the ledger code and can't be changed. Therefore, the descriptions appear in gray. The padlock icons appear against each of the cells in this column too.

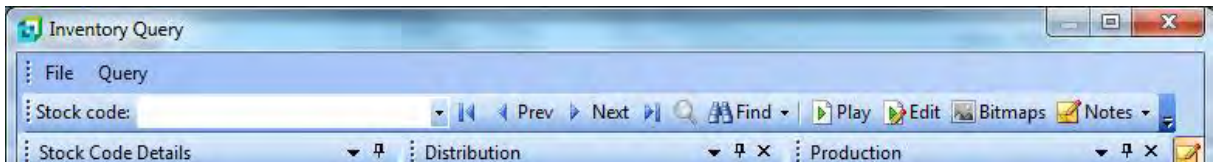
Journal Details						
Ledger code	Description	Transaction date	Reference	Credit amount	Dr	
10-1110	Receivables - North	20/07/2011	e3	20.00		
10-2400	Sales Tax - North	20/07/2011	e3			
		20/07/2011	e3	0.00		

**Figure 5-68:** Disabled cells appear in gray with the padlock icon



## Chapter 6 - Toolbars and the Menu Bar

The vast majority of SYSPRO programs have menu bars and/or toolbars. These are located at the top of the screen immediately under the program's description. **Figure 6-1** shows a portion of the *Inventory Query* screen. The *Menu Bar* contains the two menu items of *File* and *Query*. Immediately below this is the *Toolbar*, which starts with a toolbar item for entering the stock code.



**Figure 6-1:** The *Inventory Query* screen showing the *Menu Bar* and the *Toolbar*

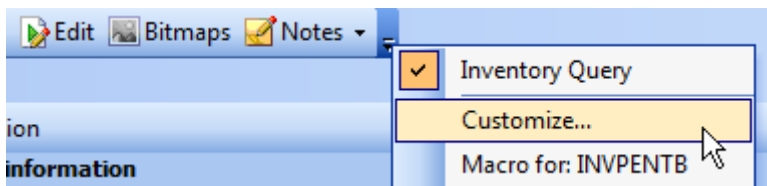
### Moving Toolbars and Menu Bars

At the far left of a toolbar and menu bar is a *Gripper*, which consists of four dots. You can move a toolbar or menu bar to a new location by clicking on the gripper and dragging the bar to a new location within the section between the program description and the highest form/listview. During this process the mouse pointer will change to have four radiating arrows (see **Figure 6-2**). Once it is in the correct location you release the mouse button and the bar will remain in this location. Alternatively, you can drag it anywhere else on the screen and release it so that it becomes a floating menu/toolbar.



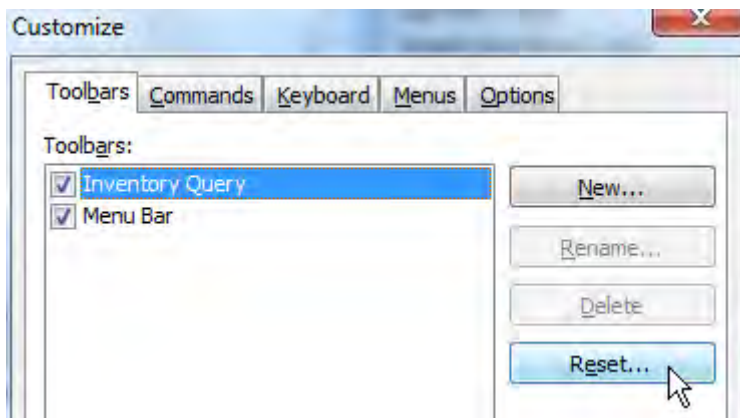
**Figure 6-2:** Dragging the toolbar to a new location

If you decide to put the toolbar/menu bar back as it originally was, you can either manually drag it back to its original position, or use the *Reset* option. This option will undo all changes that have been made to the toolbars and menu bars in this program. This option is available by right-clicking anywhere on the toolbar or menu bar and selecting *Customize* (see **Figure 6-3**).



**Figure 6-3:** Selecting the *Customize* option from the toolbar

The *Customize* screen will be displayed, with the *Reset* button on the right. If you select this button you are prompted that all changes to the toolbars and menu bars will be undone. If you select the *OK* button, both the toolbar and menu bar will revert to their default settings. Use the *Close* button to exit the customize mode.



**Figure 6-4:** Using the *Reset* option to set the toolbars and menu bars back to default

## Hiding/Showing Buttons on a Toolbar

On standard toolbars you can show or hide the standard buttons. If you click on the *Toolbar Options* button and select *Add or Remove Buttons*, a list of the standard toolbars for this program will be displayed. When one of these standard toolbar names is selected, a list of the standard buttons is displayed (see **Figure 6-5**). The buttons that are currently displayed will have a checkmark against them. If you uncheck one of the buttons, the matching button is removed from the toolbar in real time. If you check one of the unchecked buttons, it reappears.

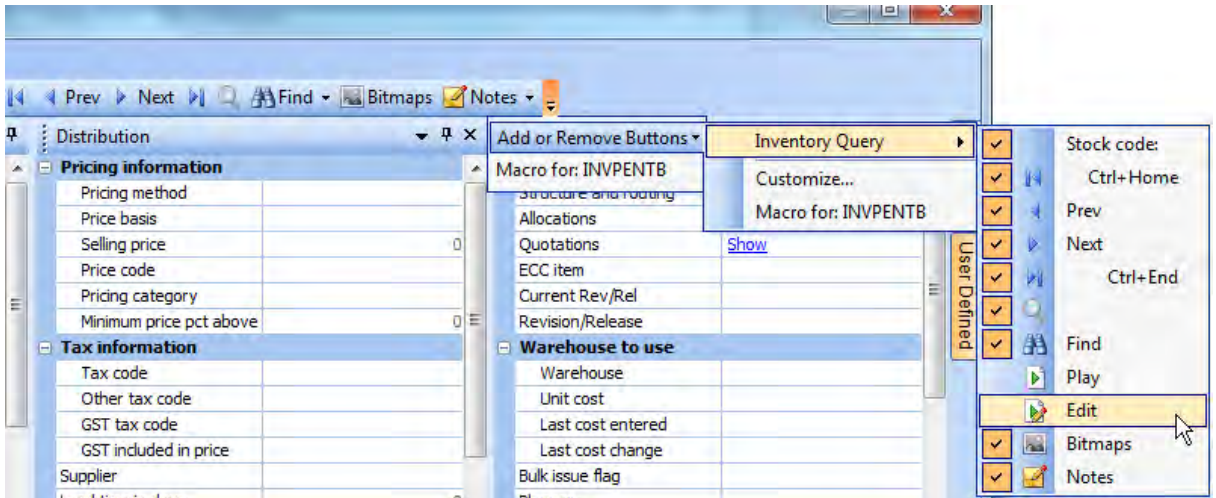


Figure 6-5: Showing/hiding the toolbar buttons

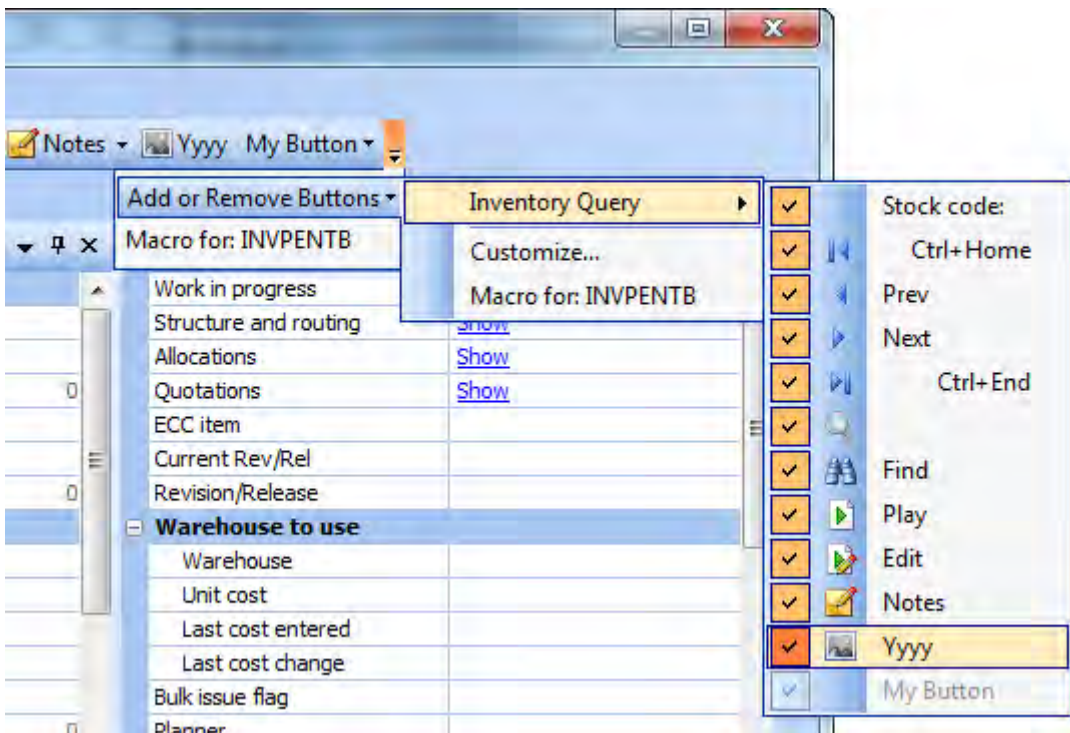


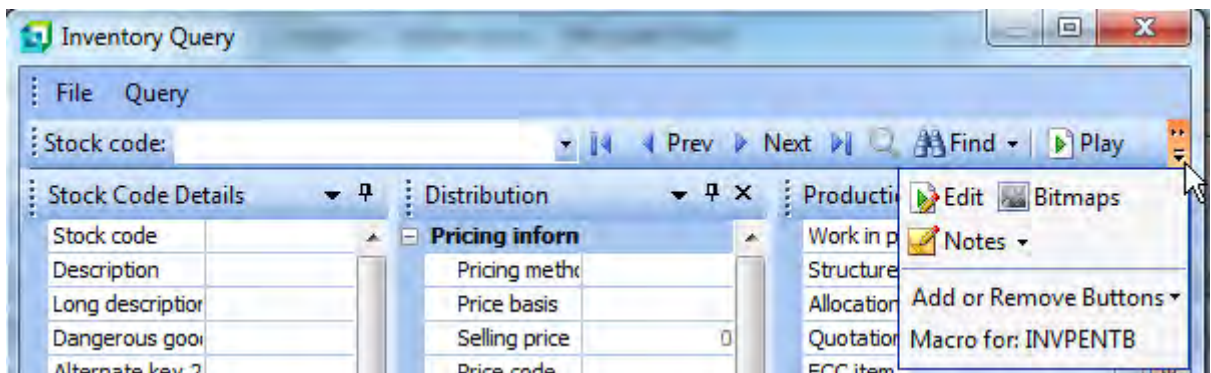
Figure 6-6: Using the show/hide option for the *Inventory Query* toolbar

If buttons have been moved from their original toolbar to another they appear unchecked in the list of the original. They will reappear on the original toolbar if their option is checked, however, the button will remain on the toolbar where the operator placed it, so will appear on two toolbars.

Buttons that have been renamed will appear in this list with their new names, and can be shown/hidden. Buttons that have been added by the operator or administrator will appear in this list, but the option to show/hide them is disabled. **Figure 6-6** shows the show/hide option for the buttons on the *Inventory Query* toolbar. The second to last button has been renamed from *Bitmaps* to *Yyyy*. Because it is a standard button that has been renamed, it is available to be hidden/shown. However, the *My Button* button was created by the operator and therefore is not available to be hidden/shown and has been greyed out.

## Creating a New Toolbar

Most programs have one toolbar, but some have more than one. Some toolbars contain many buttons, such as the toolbar in *Inventory Query* that can be seen in **Figure 6-1**. When reducing the width of the screen to below the original width of the toolbar, the buttons to the right disappear. These can be seen if you click on the *Toolbar Options* button (see **Figure 6-7**).

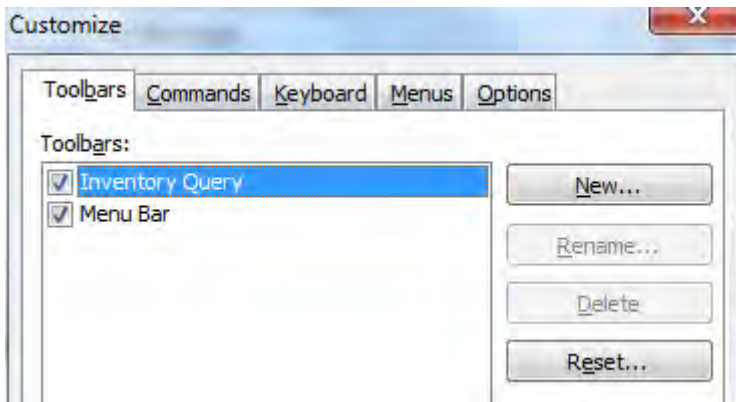


**Figure 6-7:** Using the *Toolbar Options* button to view buttons that can no longer fit on the screen

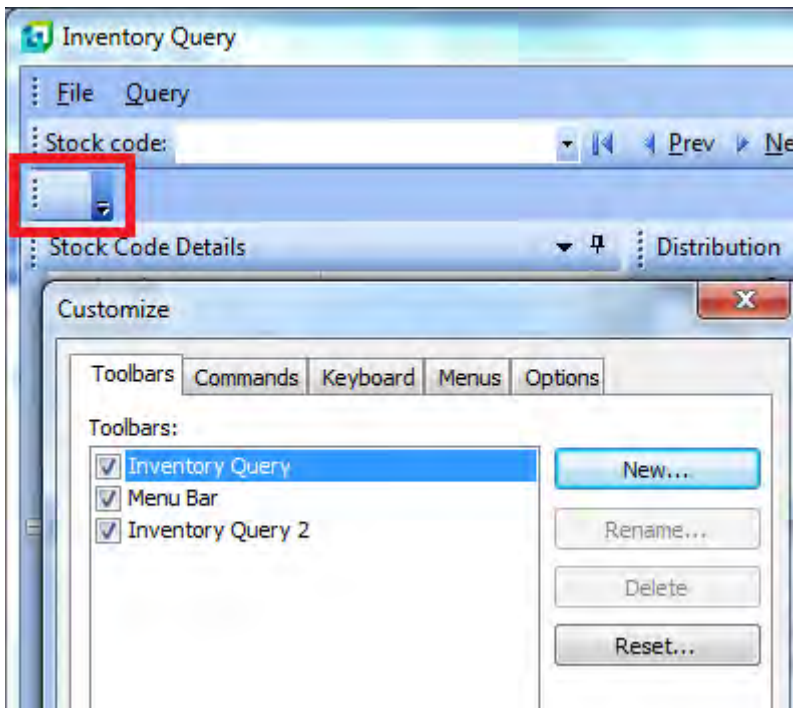
If you prefer to see all the buttons on this reduced width screen you can create another toolbar and move some of the buttons from the original toolbar to the new one. To create a new toolbar you need to be in customize mode. This is done by right-clicking anywhere on the toolbar and selecting *Customize* from the displayed menu. The *Customize* screen is displayed and the available toolbars listed. In most cases there is a toolbar with the program description and *Menu Bar* (see **Figure 6-8**).

To add a new toolbar, click on the *New* button. You will be prompted to supply a name for this toolbar (in this example the name *Inventory Query 2* was used). When you click on the *OK* button the toolbar

name is added to this list and an empty toolbar is added to the toolbar area of the program (see **Figure 6-9**). Use the *Close* button to exit customize mode.



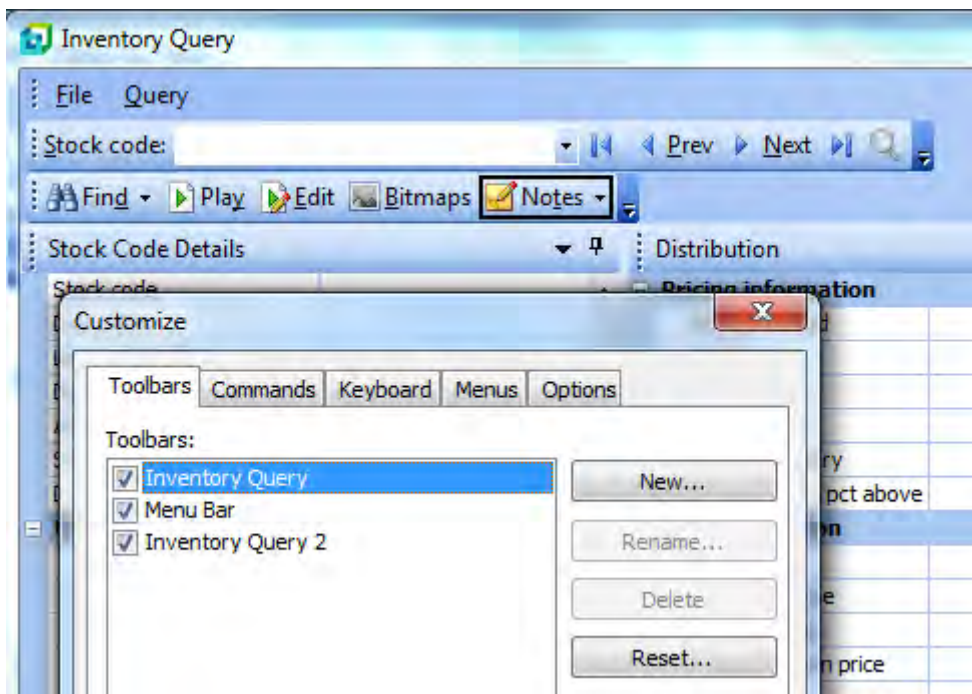
**Figure 6-8:** The *Customize* screen listing the available toolbars



**Figure 6-9:** Adding a toolbar called *Inventory Query 2*, with the empty toolbar highlighted

## Moving Buttons from one Toolbar to Another

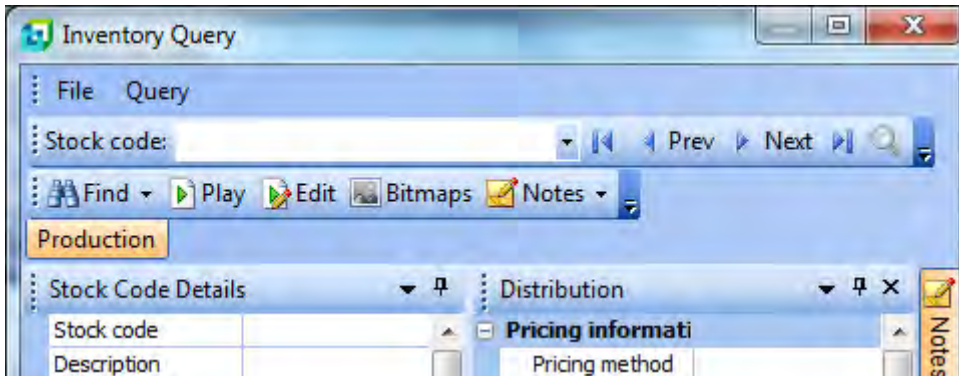
To move buttons from one toolbar to another you must be in customize mode. Call up this mode by right-clicking on one of the buttons and selecting *Customize* from the menu. Click on one of the buttons on the *Inventory Query* toolbar and drag it to the *Inventory Query 2* toolbar. A black vertical line will appear on the *Inventory Query 2* toolbar at the point where the button would be placed if you released the mouse button. When you release the mouse button the toolbar button is removed from the original toolbar and appears in the new one. The button on the new toolbar is highlighted. Repeat this process for all the other buttons that must be moved from the original toolbar to the new toolbar (see **Figure 6-10**).



**Figure 6-10:** The buttons have been copied from the original toolbar to the new one

Once the copy process is complete you exit customize mode by clicking on the *Close* button. Because there are now two toolbars, all of the buttons can be seen on the reduced width screen (see **Figure 6-11**).

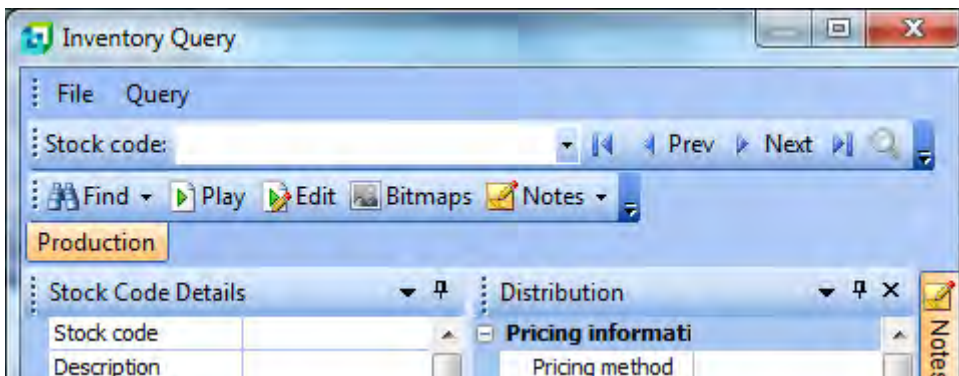




**Figure 6-11:** All the buttons are visible within the reduced width screen

## Modifying a Button's Name and Functionality

The name and action performed by an existing button can be changed. From within customize mode, right-click on the relevant to view the properties for the button (see **Figure 6-12**). The name is changed by overwriting the existing name and pressing the *Enter* key. The display of the button's properties will be closed, and the button name will be changed. If you want to add a shortcut keystroke to the button, add an *ampersand* directly before the letter that is to be the shortcut. In **Figure 6-12** you can see that the ampersand has been added just before the letter *M*. Once saved, if you were to use the shortcut keystroke *Alt + M*, the action of this button would be invoked. To change any of the other values against the button requires that you right-click on the button again.



**Figure 6-12:** Changing the name and functionality of a button

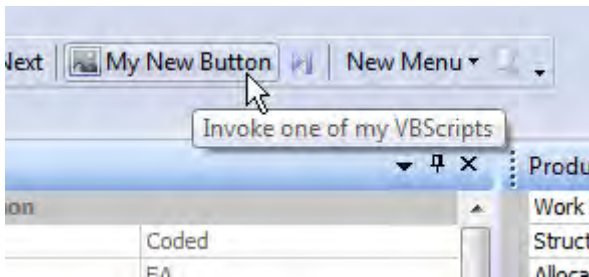
You can configure an image to be displayed against this button, which is made up of 16 X 16 pixels. You can copy an image from another button and paste it against this button, you can reset this button

to its default, you can select the image from a list of standard ones, or you can call up a button image editor and tweak an existing one/create your own.

The button can be configured to show the default style (which shows the icon that is configured for the button) to show only the button's name, or to show both the button's image and its name.

The button can be configured to call a SYSPRO program, call another application, or call a VBScript function. Whichever of these was entered last will be the one used, and the others will be removed. The application name and path must be relative to the client machine, not the server.

You can set a tooltip against the button, which will be displayed when you hover over the button (see **Figure 6-13**).



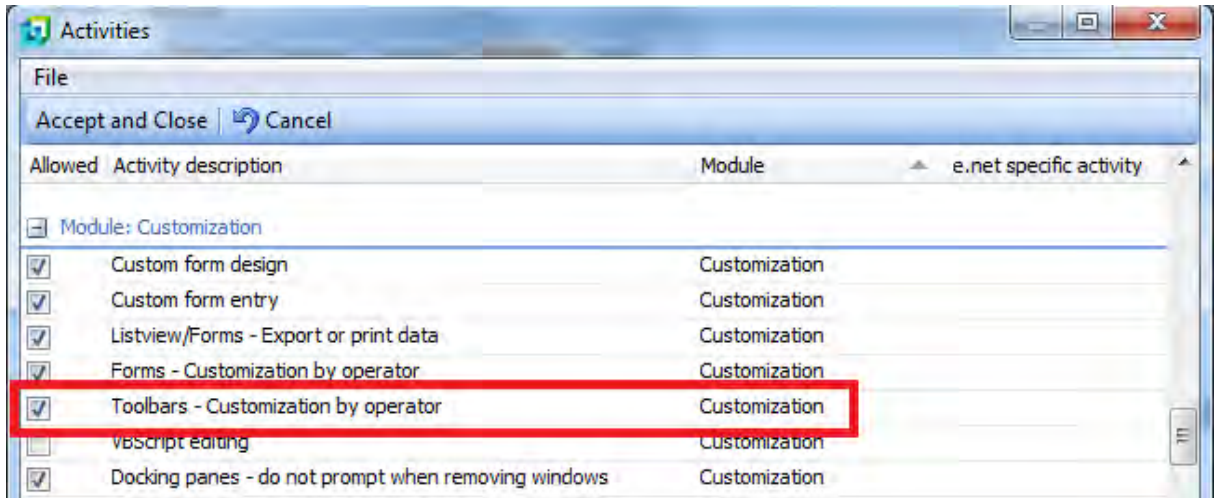
**Figure 6-13:** The tooltip in use

## Creating New Buttons on a Toolbar

The simplest way to add new buttons to an existing toolbar is to copy an existing button from this or another toolbar. This is done within customize mode. Hold down the *Ctrl* key on the keyboard and click on the button that is to be copied. Drag the button to another location on the toolbar. As you hover over the toolbar, an area will be highlighted with a black vertical bar. This shows where the button will be placed if you released the mouse button. When you release the button a duplicate of the selected button is added to the toolbar. You can change the name/functionality of the button by right-clicking on it while still in customize mode (see the section *Modifying a Button's Name and Functionality* above).

## Security Settings Affecting Toolbars

Administrators can restrict operators from modifying toolbars/menu bars using the operator activity: *Toolbars – Customization by operator*. The operator *Activities* are located on the *Security* tab of the *Operator Maintenance* program. This option is located under the *Customization* section of the *Activities*.



**Figure 6-14:** The operator activity that prevents operators from modifying their toolbars

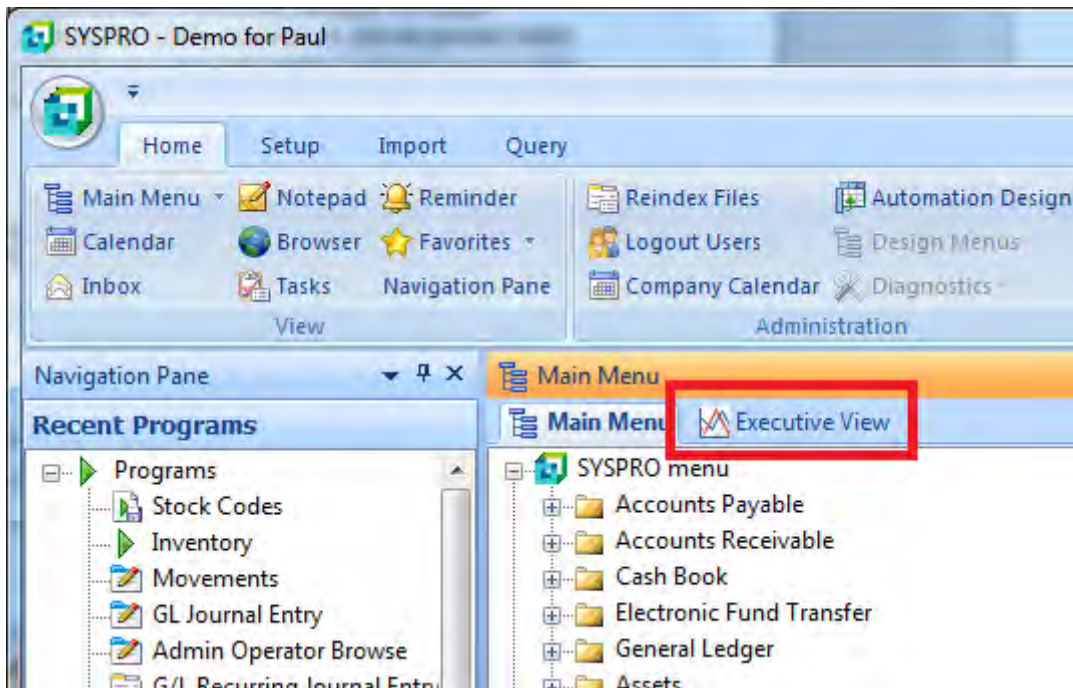
## Toolbars and Roles

If your operator is a member of a role, the ability to go into the toolbar's *Customize* mode is disabled, unless you are in *Design Role Layout* mode before calling up the program. The ability to go into *Design Role Layout* mode is configured using the *Role layout design* checkbox on the *Options* tab of the *Operator Maintenance* program.



## Chapter 7 - Customized Panes and Associated Panes

*Customized Panes* are SYSPRO panes that can be created by an operator and/or administrator, and are typically used to display data. They can also be used to create/update data. There are 10 different types of customized panes that can be created. These are: *Graph*, *Listview*, *Web browser*, *SRS/Crystal report*, *PDF Viewer*, *Rich text notepad*, *.NET User Control*, *Form*, *SearchWindow* and *Executive Dashboard*.



**Figure 7-1:** The *Executive View* tab alongside the *Main Menu* tab

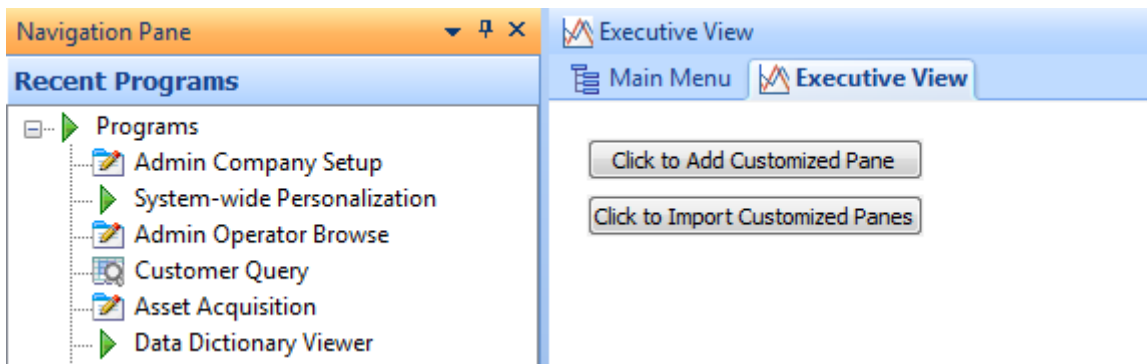
To create most of these types of customized panes from scratch would require development skills and would fall beyond the scope of this document. However, just because you don't have development

skills does not mean that you can't use customized panes. Several of these customized pane types ship with pre-developed templates that require no development skills, so the creation of these will be covered. In addition, once created, you can export the customized pane to a third party. Importing these files from a third party is also covered.

*Associated Panes* are predefined customized panes that are linked to certain master data fields such as Customer, Supplier, Sales Order, Warehouse, etc. The associated panes are added by right-clicking on the master record field and selecting *Insert Associated Pane* from the displayed menu. A list of valid associated panes for the master field is displayed, along with which customized pane type they use to display the data (Graph, Listview, Form, etc.). Whenever the value of this field changes, the associated pane is refreshed to match.

## Adding a Customized Pane

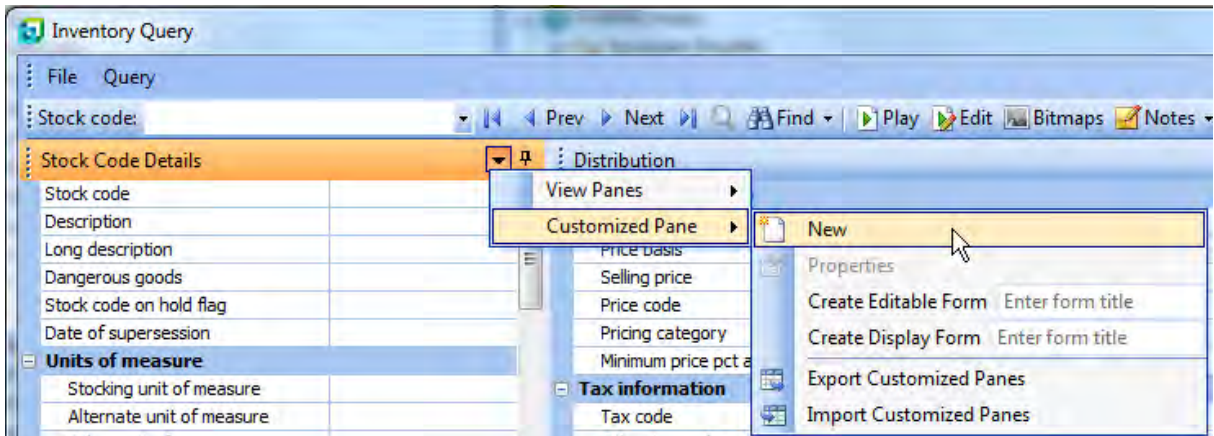
Customized panes can be created within SYSPRO programs, or within the *Executive View*. The *Executive View* is a tab that appears alongside the SYSPRO *Main Menu* tab by default (see **Figure 7-1**).



**Figure 7-2:** The *Executive View* without any customized panes

If you select the *Executive View* tab, and no customized panes have been defined, the screen will contain two buttons. The first button is to create a customized pane, and the second to import a customized pane (see **Figure 7-2**). The *Click to Add Customized Pane* button is greyed out if the operator does not have the *VBScript editing* option checked in the operator *Activities (Ribbon bar | Setup tab | Security section | Operators | highlight operator | Change button | Security tab | Activities section)*.

To create a customized pane from within a SYSPRO program, click on the *Menu* button on the titlebar of one of the forms, and select *Customized Pane | New* from the displayed menu (see **Figure 7-3**).



**Figure 7-3:** Adding a customized pane to a SYSPRO program

Whether you started creating your customized pane from the *Executive View* or from the *Menu* button of a program, the screens and procedure from this point on are the same. The *Customized Pane Editor* screen is displayed. Beneath the toolbar are three panes. The first is *Pane Properties*, where you supply information about the pane. The second option on this pane is the *Object type* dropdown list, where you define the type of customized pane that will be created.

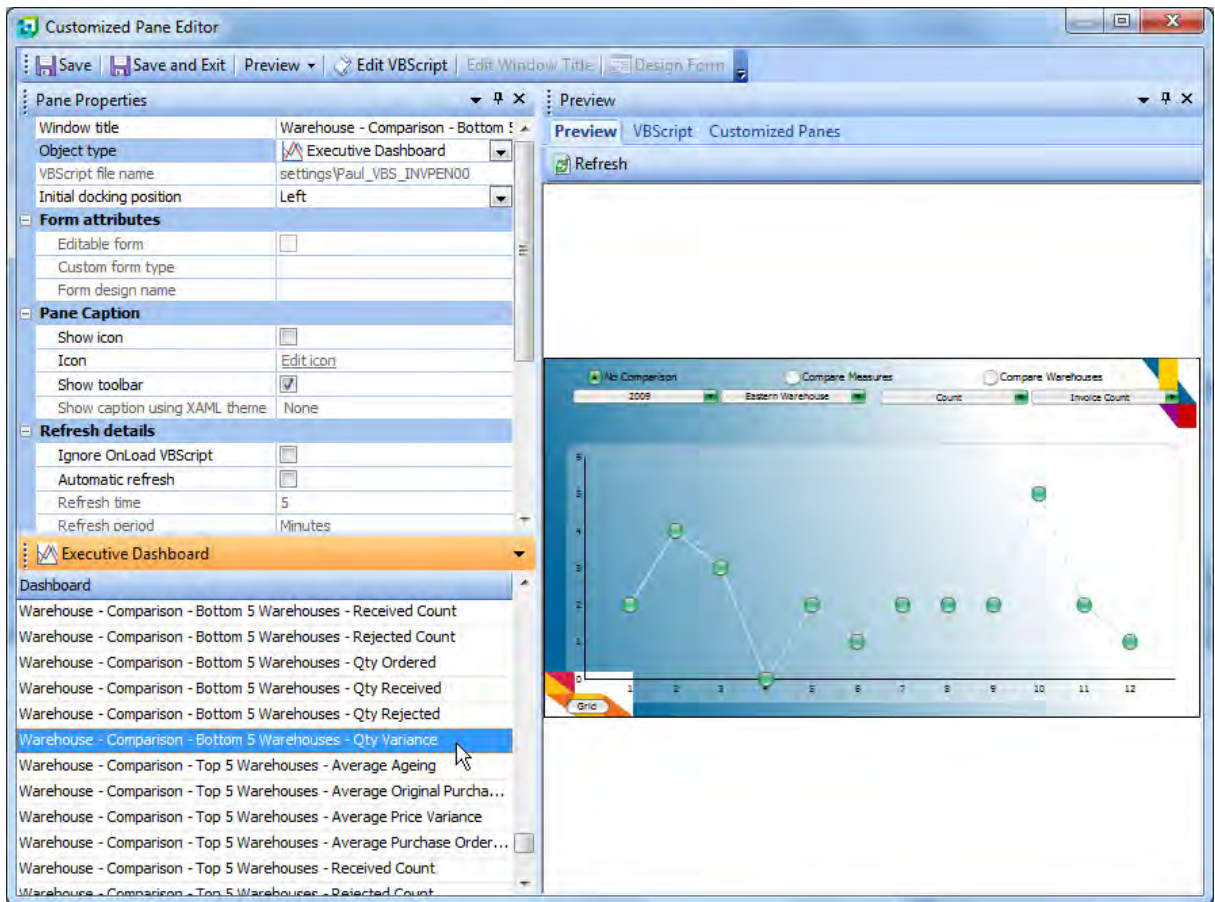
The choices against the *Object type* dropdown are Graph, Listview, Web browser, SRS/Crystal report, PDF Viewer, Rich text notepad, .NET User Control, Form, SearchWindow and Executive Dashboard.

If the object type is set to *Graph*, *Listview*, *Form* or *Executive Dashboard*, the name of the pane at the bottom of the screen will be changed to match. This pane will become a listview and all templates for this object type that are provided with SYSPRO will be listed here. These templates can be used within any program as they are not related to the data within the program. Typically, customized panes that are created by administrators/operators are based around the information within the current program and linked to the current values in the forms of the program.

If you move your mouse pointer over the names in this list, a tooltip is displayed explaining the purpose of each template. Double-clicking on one of the names in the list imports this customized pane template. The fields in the *Pane Properties* pane are populated with the values for this customized pane, such as the window title. At this point, the third pane, called *Preview*, is populated with a preview of the customized pane.

**Figure 7-4** shows the *Customized Pane Editor* screen where the operator has selected an *Object type* of *Executive Dashboard* from within the *Pane Properties* pane. The pane at the bottom of the screen has changed to contain a list of the templates for this object type. The operator has double-clicked on

the *Warehouse – Comparison – Bottom 5 Warehouses – Qty Variance* name in this listview, and the *Preview* pane is displaying a preview of this customized pane.



**Figure 7-4:** Selecting one of the standard *Executive Dashboard* customized panes

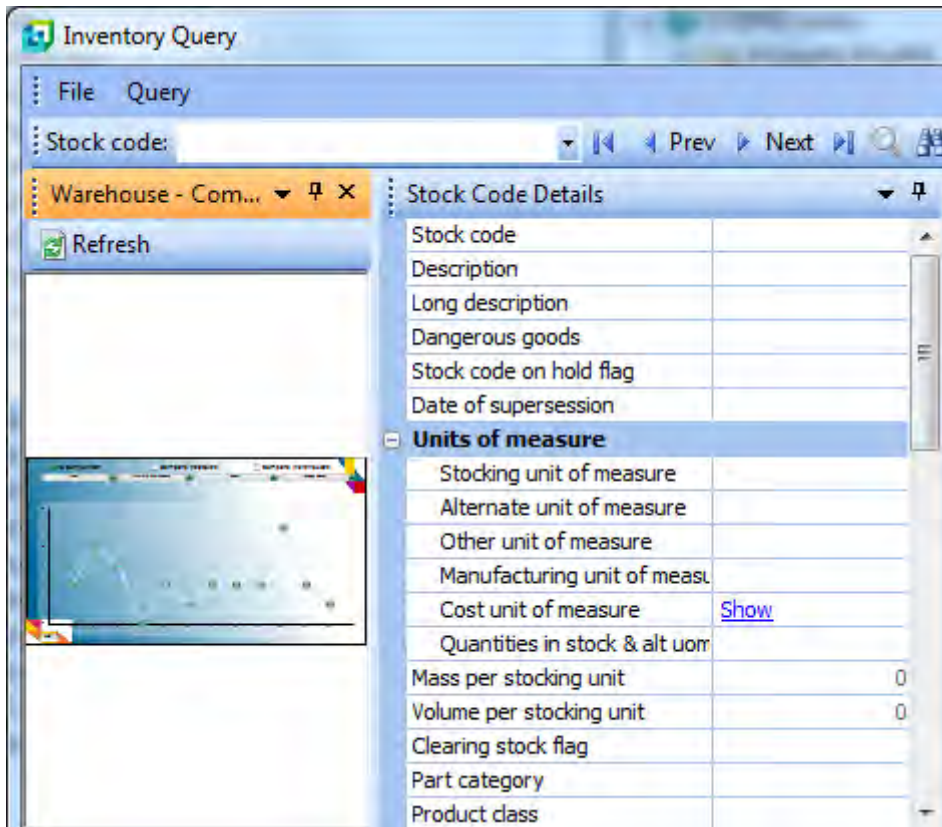
If you select the *Save and Exit* button, this screen will be closed and the customized pane will be added to the program. If you close the editor the changes are discarded. By default, the customized pane is created to the left of the pane where the operator was residing when they selected to create the customized pane. The *Initial docking position* option enables you to set this to Left, Right, Top, or make the pane float.

As this is a pane like any other in this program, it can be moved, resized, minimized to a tab, or floated. Some of these templates are best viewed either tall or wide, so you should move them to a



suitable location. As it is a customized pane you can make changes to its VBScript code (if you have development skills) just like you could with a customized pane that you created yourself.

The images inside the *Executive Dashboard* customized panes are special in that they retain their aspect ratio. If you have an image that needs more horizontal than vertical spacing and you place it in a narrow customized pane, it will appear very small to preserve its horizontal/vertical relationship (see **Figure 7-5**).



**Figure 7-5:** The *Executive Dashboard* maintaining its horizontal/vertical relationship

Customized panes of other object types such as listviews and graphs do not need to retain their aspect ratio and will resize to fit the available space.

There is an option to assist you if you need to add several customized panes templates. Instead of adding one at a time (which involves exiting the customized pane editor, then calling up the editor again) you can check the *Auto Save Templates* option (see **Figure 7-6**). With this option checked, as

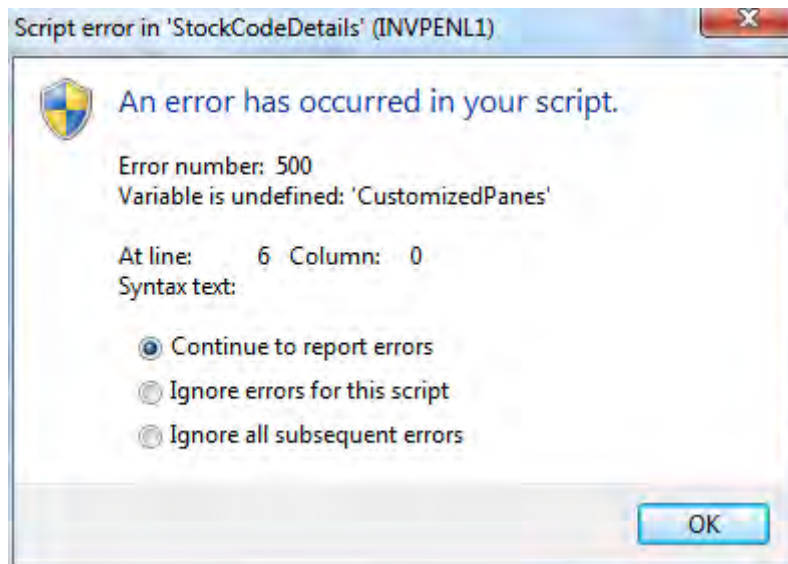
you double-click on the template it is added for you. If you double-click on another it is also added for you. You can also manually create a customized pane, click on the *Save* button and start creating the next one. When you exit the customized pane editor all of these customized panes will be visible within the current program.



**Figure 7-6:** The *Auto Save Templates* option within the customized pane editor

## Deleting a Customized Pane

Customized panes are deleted by clicking on the *Close* button (the **X** in their titlebar). Apart from being prompted if you want to delete the customized pane, it is that simple to remove the standard customized panes.



**Figure 7-7:** A script error caused by deleting a customized pane that is called by another pane

However, if someone has written a customized pane for you, it is likely that it requires some code to force it to refresh its contents. This is usually done by adding VBScript to another standard pane's *OnRefresh* function so that when the standard pane refreshes it causes the customized pane to refresh.

If script has been added to a standard pane to refresh the customized pane, and the customized pane is deleted, the script will report a problem similar to that in **Figure 7-7**.

Resolving this issue requires the use of the *VBScript Editor*, and falls outside the scope of this document. This will be covered in the document on the customization capabilities of SYSPRO for people with development skills.

## Importing Customized Panes

You have already seen that you can add the standard customized panes that are supplied with SYSPRO. Another way of adding customized panes when you do not have your own development skills is to import one that has been created for you by someone else.

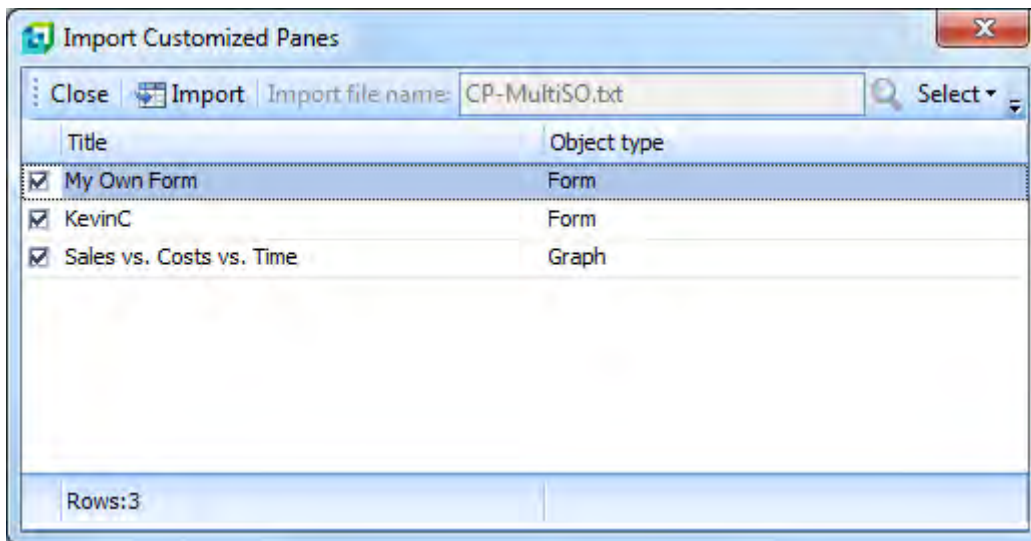
If someone has created a customized pane within their copy of SYSPRO, they can export it using the *Export Customized Panes* option against that program (*Menu* button, *Customized Pane*, *Export Customized Panes*). A listview is displayed containing all the customized panes for this program, and they can choose which ones to include/exclude from the export. There is also a checkbox on the toolbar to email this export file. Finally, they are prompted for a filename and location.

The import process is very similar to the export process. The first decision to make is where the imported customized pane(s) must reside. This can be against the *Executive View* or within a SYSPRO program. The person supplying the customized pane may stipulate where it must be located, as it may need to interact with other forms within a program. If the customized pane is supposed to be against the *Executive View*, and there are currently no customized panes against this, you start the import by clicking on the *Click to Import Customized Panes* button that can be seen in **Figure 7-2**.

When importing a customized pane into the *Executive View* where there are already customized panes present, or when importing them into a normal SYSPRO program, the process is the same. Click on the *Menu* button on the titlebar of one of the forms, and then select *Customized Pane*, *Import Customized Pane*. You will be prompted to supply the name and location of the import file, which is always a *.txt* file. Once you have located the file, you can either highlight it and click on the *Open* button or double-click on the file name.

If the selected file is not a customized pane import file, a message to this affect is displayed. If the selected file is a customized pane import file, the file is read and the names of all the customized panes held within it are displayed in a listview (see **Figure 7-8**).

A checkbox alongside the names of the customized panes in this listview allows you to choose which customized panes to import. Once you have made your selection, you click on the *Import* button and the customized panes are created for you.



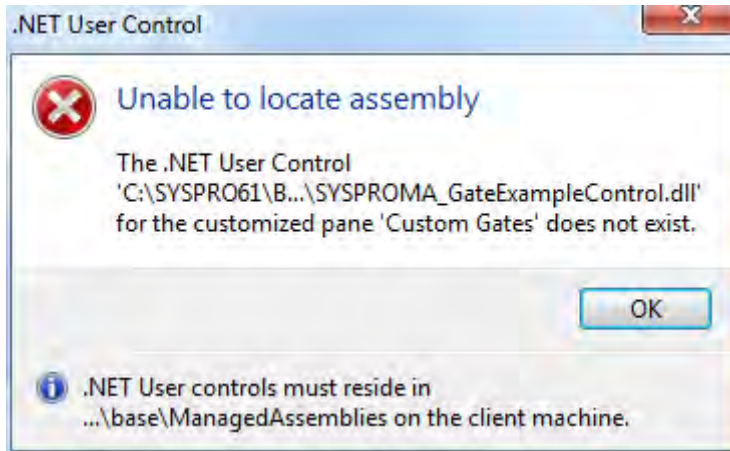
**Figure 7-8:** All the customized panes held within an import file, displayed in a listview

### Interacting with other Customized Panes (.NET User Controls)

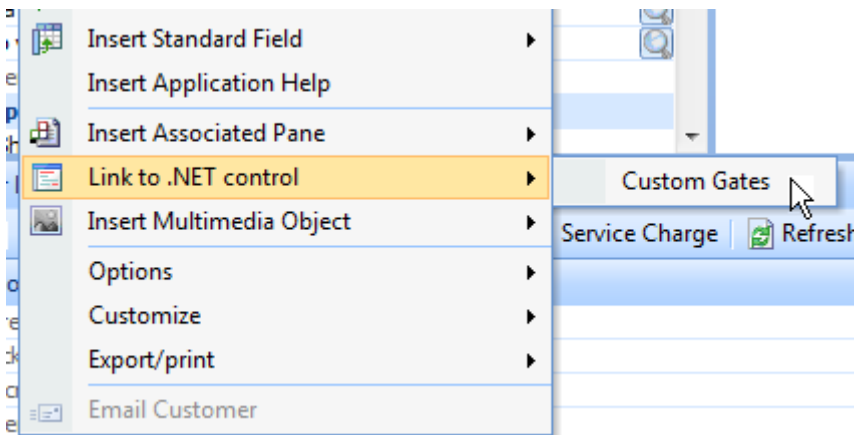
A *.NET User Control* is a piece of code (usually a .DLL file) that will perform a specific task. This user control can be embedded within a SYSPRO customized pane and can be made to interact with the SYSPRO program in which the customized pane exists. The writing of this .NET User Control (and the VBScript within the customized pane to get it to talk to the SYSPRO program) falls outside the scope of this document.

However, you may be sent a customized pane import file containing a .NET User Control by a third party, as well as the .NET User Control. This import file is imported in the same way as explained in the section *Importing Customized Panes*, but before performing this you must put the .NET User Control file into SYSPRO's `Base\ManagedAssemblies` folder. If you attempt to import the customized pane before placing the user control in the `Base\ManagedAssemblies` folder you will receive a message similar to that in **Figure 7-9**.

Once the import has been completed, you may be required to perform one additional step, at the request of the developer of the user control. If information is to be passed back and forth to the .NET User Control, this is performed by refreshing the customized pane in which the user control is stored. The developer of the customized pane will want this to happen when the value changes against a specific field on one of the forms within this SYSPRO program.



**Figure 7-9:** Importing a *.NET User Control* customized pane before copying the control to the `Base\ManagedAssemblies` folder

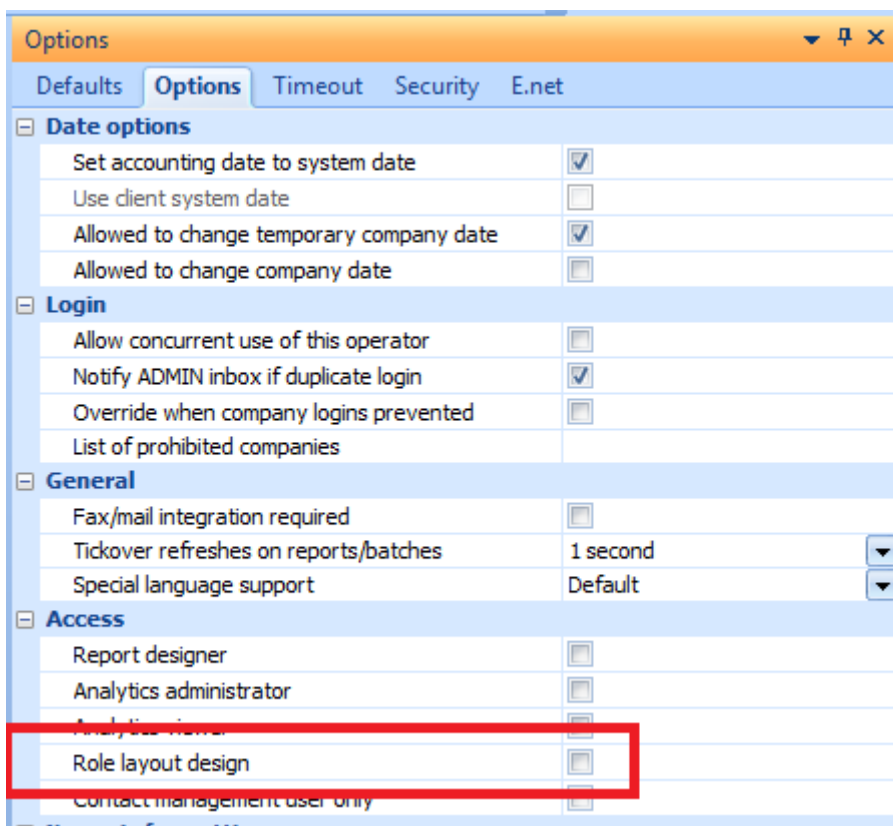


**Figure 7-10:** Linking a SYSPRO field to the customized pane containing the *.NET User Control*

## Customized Panes and Roles

Roles are a means of setting program defaults, behaviour, and security options for groups of operators. Operators that belong to a role will not have the ability to add, maintain, delete, or import a customized pane within a SYSPRO program during their normal activities. Within a SYSPRO program the *Menu* button would not be present in the titlebar of any of the forms.

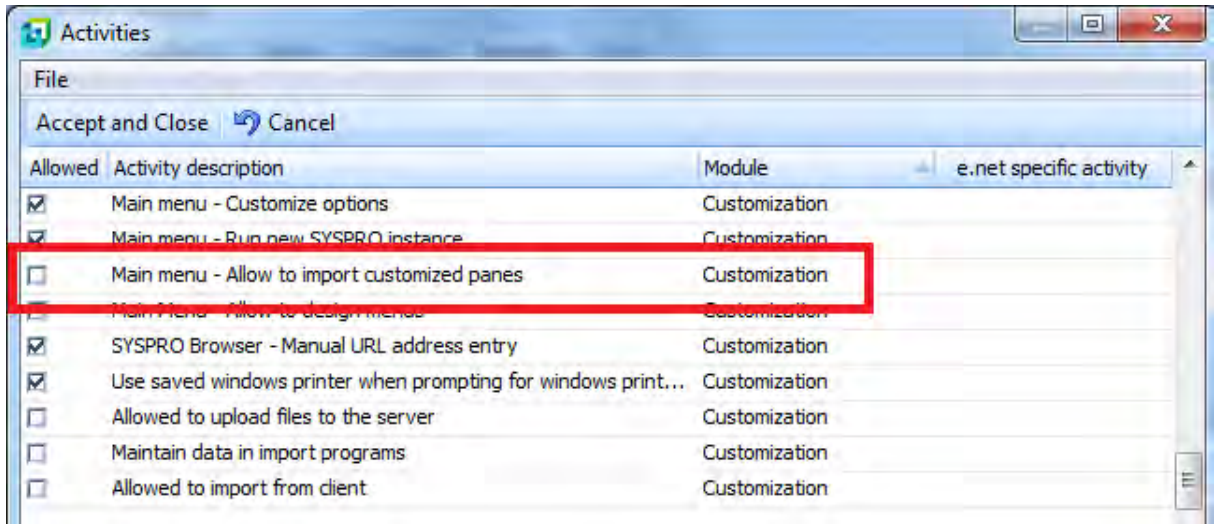
To perform these tasks they would need to go into *Design Role Layout* mode for this role before calling up the SYSPRO program. To be able to go into *Design Role Layout* mode the operator would need to have the *Role layout design* option checked against their operator code (see **Figure 7-11**). Once the operator goes into *Design Role Layout* mode they can add/maintain/delete customized panes in the same way as if they were not a member of a role.



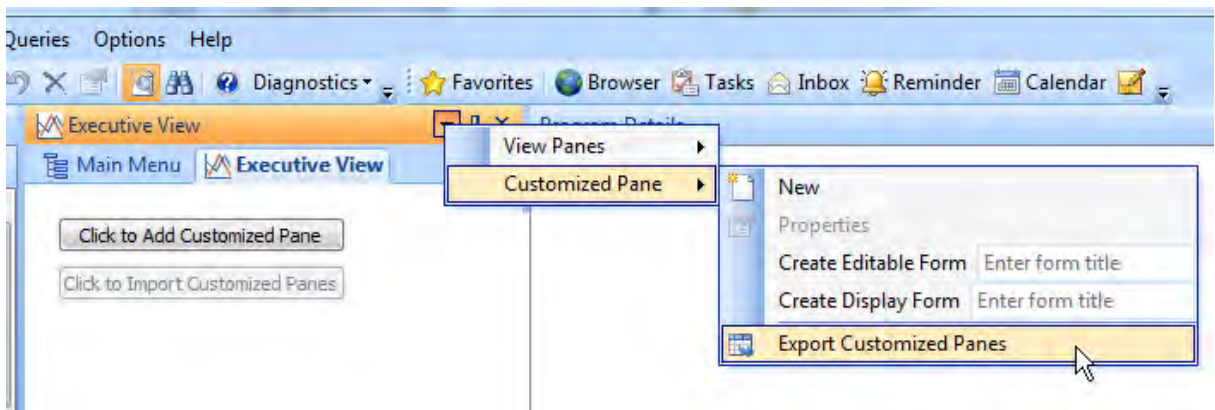
**Figure 7-11:** The *Role layout design* option that allows operators to add/change customized panes

## Operator Activities that Affect Adding/Importing Customized Panes

The *Executive View* (that appears by default as a tab next to the SYSPRO *Main Menu*) as well as all the forms that can be accessed without calling up a SYSPRO program, are not controlled by roles. An operator activity prevents an operator from importing a customized pane (*Setup | Security | Operators | select the operator | Edit | Change | Security tab | Activities* section). If this is unchecked an operator will not be able to import a customized pane from one of these locations (see **Figure 7-12**).



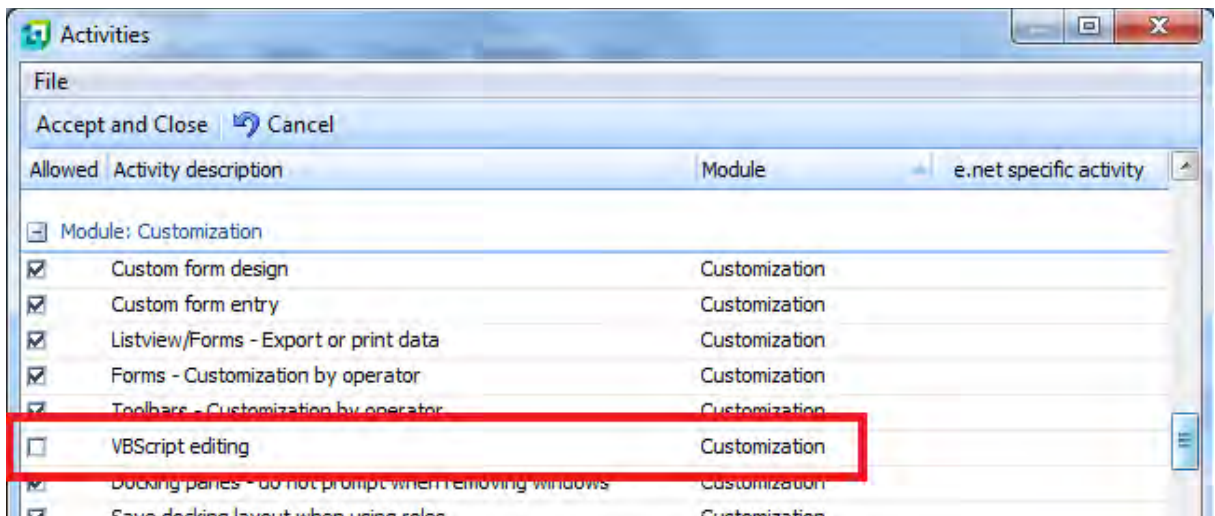
**Figure 7-12:** Operator activity to prevent importing customized pane from outside of a SYSPRO program



**Figure 7-13:** The *Click to Import Customized Pane* button greyed out, and the *Import Customized Pane* option is not present

If this option is unchecked and the operator attempts to import a customized pane via the Executive View, the button marked *Click to Import Customized Pane* will be greyed out. If they attempt to import a customized pane using the *Menu* button against a form, the *Import Customized Pane* option will not be present. **Figure 7-13** shows both these scenarios.

The operator activity *VBScript Editing* controls whether the operator can add or maintain customized panes within a SYSPRO program, regardless of whether the operator is part of a role. Even if unchecked an operator can still delete an existing pane from within a program. Against the Main Menu/Executive View they can still import a customized pane, or delete an existing one. **Figure 7-14** shows this option.



**Figure 7-14:** The option to prevent and operator from adding or maintaining a customized pane

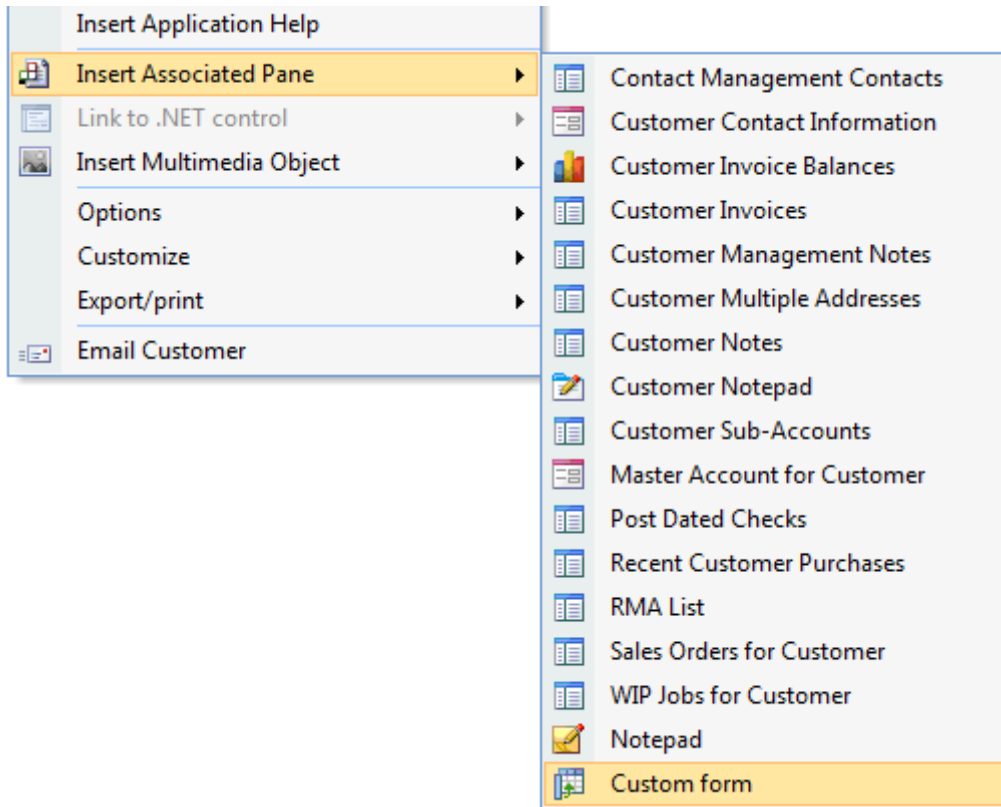
## Adding an Associated Pane

Many master fields have associated panes linked to them. These are Customer, Stock Code, Supplier, Job, Sales Order, Account, Currency, Warehouse, Customer Branch, Supplier Branch, Requisition, Requisition User, User, Bank and Purchase Order.

Where one of these names appears on a SYSPRO form, you can right-click on the field and select *Insert Associated Pane* from the displayed menu. The number of available associated panes for this field will vary depending on which field is selected. Against the associated pane's name is an icon that shows you what type of pane it is, such as Listview, Graph, Notepad, Custom Form Field, or Trendline. **Figure 7-15** shows the available associated panes that are linked to the *Customer* field.



Once selected, the associated pane creates a fully-functional customized pane within the program. If the field with which it is associated with already contains a value, then the associated pane is populated with the relevant information. Whenever this field's value changes, the associated pane will refresh with this new value.



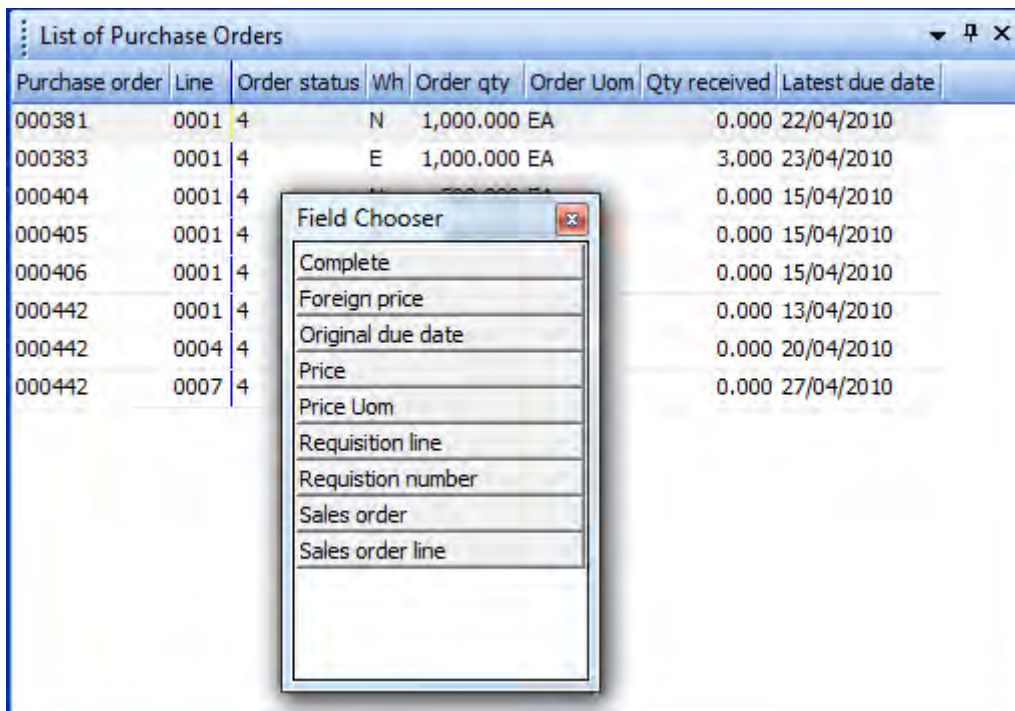
**Figure 7-15:** The list of available associated panes that are linked to the *Customer* field

When an associated pane has been added to a program (and within this program you call up the *Insert Associated Pane* option for the same field) the name of this associated pane will appear greyed out in the list.

## Maintaining Associated Panes

Most listview-based associated panes will display between five and nine columns. This is the most that can be displayed and not appear to be overcrowded. However, where relevant, the listview will have been constructed to include many more columns, they are just not displayed by default. The *Field Chooser* will contain these additional fields, which can be dragged onto the listview. Other columns that are not required by the operator can be dragged from the listview and they will appear in the field chooser.

**Figure 7-16** shows the *List of Purchase Orders* associated pane that is associated with the stock code field. There are eight columns displayed by default. The field chooser shows that there are an additional nine fields that can be dragged onto the column header so that they appear in the listview. Any of the original eight fields can also be dragged from the column header so that they no longer appear in the listview and appear in the field chooser.



**Figure 7-16:** The *List of Purchase Orders* associated pane showing the extra columns available via the *Field Chooser*.

As associated panes are customized panes, anyone with suitable access and some development skills can modify them, in the same way that they would any other customized pane.

## Deleting Associated Panes

Associated panes are deleted by clicking on the **X** at the top right of their titlebar. You will be prompted to delete the associated pane, and if you agree, the associated pane is removed from this program. If you use the *Insert Associated Pane* option for this field within the program, the name of the associated pane will no longer be greyed out and will be available for use again.



## Chapter 8 - Internationalization

SYSPRO is a global product that is sold and used in countries across the world. As such, it needs to accommodate the diverse requirements of its end users. One of these requirements is that the product can be customized for different languages. In addition to providing a simple system to allow the translation of SYSPRO different languages, a facility exists to customize the user interface to use industry or customer specific jargon or terminology. The formatting of dates and numeric values also differs by region and these can be set to local requirements.

### Language

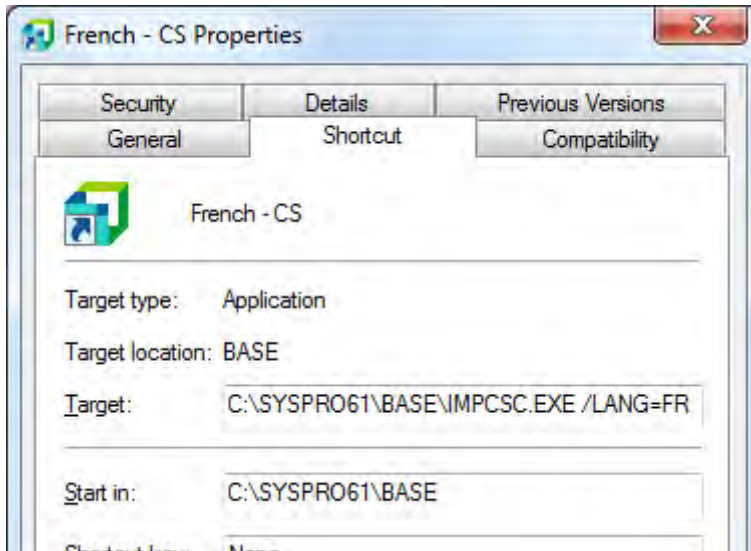
Although the default language for SYSPRO is US English, SYSPRO ships with language dictionaries that enable it to be used in French, Spanish, German, and Simplified Chinese. The language codes for these are FR, ES, DE, and ZH. There are three different ways to specify that SYSPRO must be used in a language other than English.

The first method is to specify a *LANG* parameter on the command line or against the SYSPRO icon. This is done by adding */LANG=* followed by the relevant language code after the SYSPRO trigger program's name. The trigger program is ***IMPCSC.EXE*** for a client server workstation and ***IMPACT.EXE*** in a standalone environment. **Figure 8-1** shows the properties for the SYSPRO icon on a client workstation where SYSPRO is French. Neither the parameter name, nor the language code is case-sensitive, so */LANG=FR* and */Lang=fr* will put SYSPRO into French.

The second method is to set an environment variable under the operating system. The variable is *%LANG=* followed by the language code, so the variable would be *%LANG=FR* for French.

Both of the above methods set the language code for the current user only.

The third method is to insert your language code against the Language prompt on the *System Setup* program's *General* tab (*Ribbon bar | Setup tab | Setup Options* section | *General Setup* dropdown list | *System Setup | General* tab). This sets the language code for all SYSPRO users (unless they override it by setting another language code using one of the above methods). The language code that is entered here is written to the *IMPACT.INI* file in the *base* folder on the SYSPRO application server

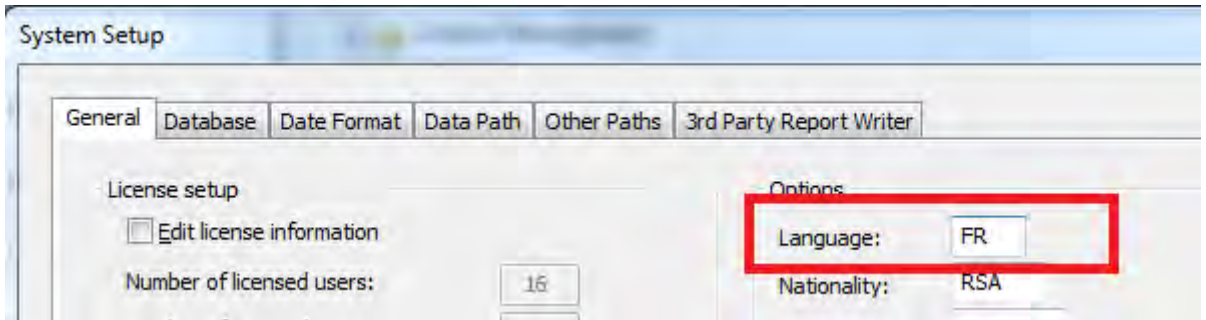


**Figure 8-1:** Setting the *LANG* variable against the SYSPRO icon

**Figure 8-2** shows the *System Setup* program where the language code has been set to *FR*. The screen still appears in English because SYSPRO uses the language code that was set when the operator logged in. After setting the language code to French and selecting the Save button, a message is displayed to say that these changes will only take effect after exiting SYSPRO. You are given the option to exit SYSPRO now, or continue working.

SYSPRO determines the default language code to use in the following order:

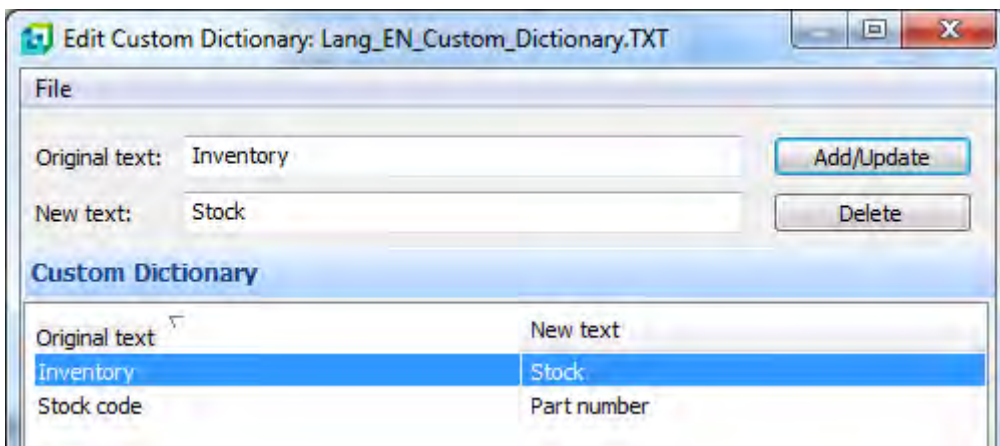
1. The language code defined on the command line using */LANG=*.  
If this is not defined, then:
2. The language code defined in the *%LANG* environment variable.  
If this is not defined, then:
3. The language code defined in the *Language* field of the *System Setup* program.  
If this is not defined, then:
4. SYSPRO uses English



**Figure 8-2:** Setting the Language in the System Setup program

## Custom Dictionary

The *Edit Custom Dictionary* program enables you to enter a string of text and specify a replacement string. Wherever this string of text would normally appear as the complete prompt in a toolbar, or caption on a form, it will be replaced by the new string. The *Edit Custom Dictionary* program is accessed from the SYSPRO Main Menu (*Main Menu | Utilities | Language Translation | Edit Custom Dictionary*).

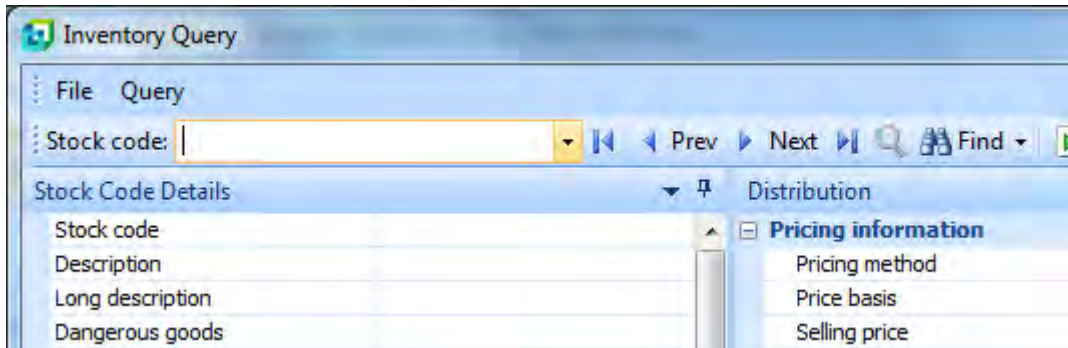


**Figure 8-3:** Adding entries to a custom dictionary using the *Edit Custom Dictionary* program

The replacement of the string of text is specific to the language code that you are using. When you call up the *Edit Custom Dictionary* program, the name of the custom dictionary that you are creating or modifying is displayed in the window title. The custom dictionary name includes the two character

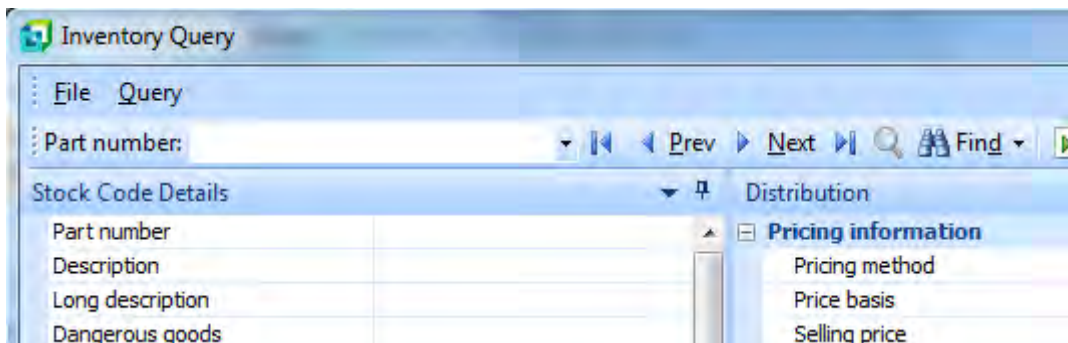
language code. In **Figure 8-3** the custom dictionary name is *Lang\_EN\_Custom\_Dictionary.txt* so it is specific to SYSPRO being used in English. You are prompted for the *Original text* and the *New text* that will be used to replace it.

**Figure 8-3** shows two entries, the second of which is that *Stock code* must be replaced with *Part number*. **Figure 8-4** shows a portion of the *Inventory Query* where the string *Stock code* appears in the toolbar, and as the first caption on the form.



**Figure 8-4:** The standard *Inventory Query* showing the string *Stock code* in the toolbar and as a caption

**Figure 8-5** shows the same portion of the *Inventory Query* after the entries have been added to the custom dictionary. The string *Stock code* has been replaced with *Part number* in the toolbar, and in the form. Note that the form name *Stock Code Details* is not replaced.



**Figure 8-5:** The updated *Inventory Query* where *Part number* has replaced *Stock code*



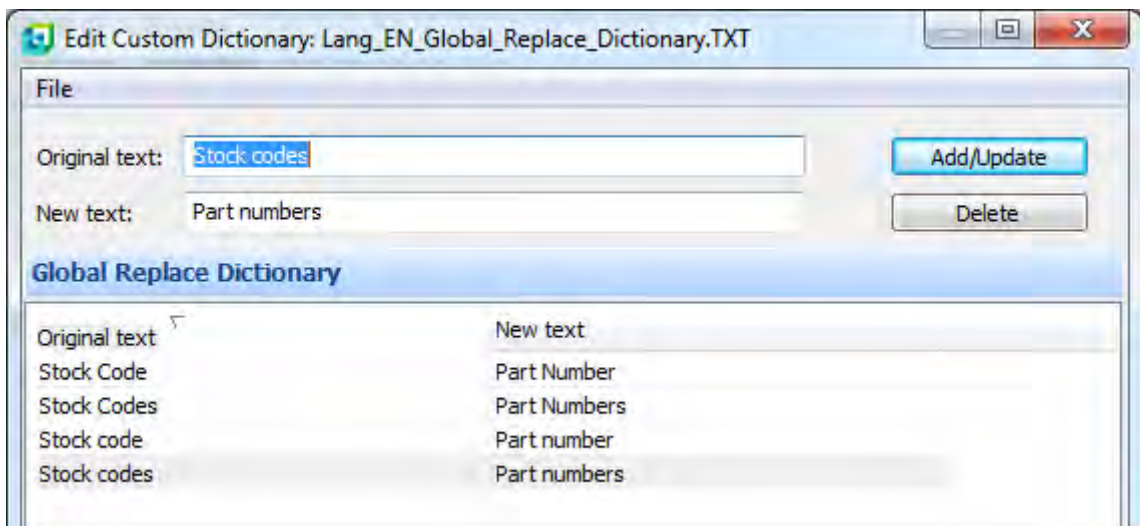
The table in **Figure 8-3** can have an unlimited number of entries, although each entry is limited to 600 characters for its text string. The *Original text* entered is not case-sensitive (i.e. Stock code, stock code and Stock Code are seen as being the same phrase in this dictionary).

If SYSPRO is being used in a language other than English, the entries in the *Custom Dictionary* must match the original English captions.

## Global Replace Dictionary

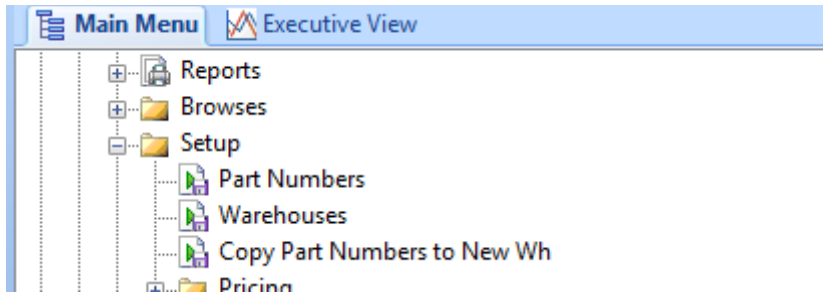
The *Global Replace Dictionary* does a similar job to the *Custom Dictionary*. It was designed to be used to replace some of the SYSPRO terms with industry-specific jargon. Instead of just replacing the text if it is in a toolbar or on a form, the *Global Replace Dictionary* replaces the text in menu items, program titles, toolbars, tabs, form names, group names and field captions. If any of these contain this text anywhere within them, that section of the string will be replaced by the new string. For example, if you specified to replace *Stock* with *Part*, any of these items containing *Stock code* would become *Part code*.

The *Edit Global Replace Dictionary* program is accessed from the SYSPRO *Main Menu* (*Main Menu* | *Utilities* | *Language Translation* | *Edit Global Replace Dictionary*). The layout of the program looks the same as the *Edit Custom Dictionary* program. The name of the dictionary appears in the program title, and is language-specific. The *Original text* entries in the *Global Replace Dictionary* are case-sensitive, so *Stock Code* and *Stock code* are different. It is limited to 500 entries, and each entry is limited to 30 characters.



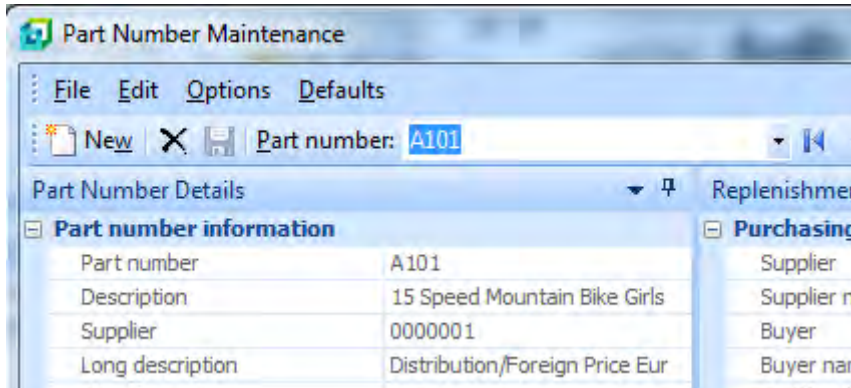
**Figure 8-6:** The *Edit Global Replace Dictionary* program with four entries for stock code

**Figure 8-6** shows the *Edit Global Replace Dictionary* program in use. As this dictionary is case-sensitive there is one entry for *Stock code* and another for *Stock Code* (as well as one for *Stock codes* and another for *Stock Codes*).



**Figure 8-7:** The *Stock Codes* menu entry on the *Main Menu* replaced with *Part Numbers*

**Figure 8-7** shows part of the inventory menu where *Stock Codes* has been replaced by *Part Numbers*. **Figure 8-8** shows the *Stock Code Maintenance* program where the program title, toolbar, form title, group name, and caption have been replaced with *Part Number/Part number*.



**Figure 8-8:** The *Stock Code Maintenance* program with *Stock Code* replaced by *Part Number*

If SYSPRO is being used in a language other than English, the entries in the *Global Replace Dictionary* must match the captions in the language being used.

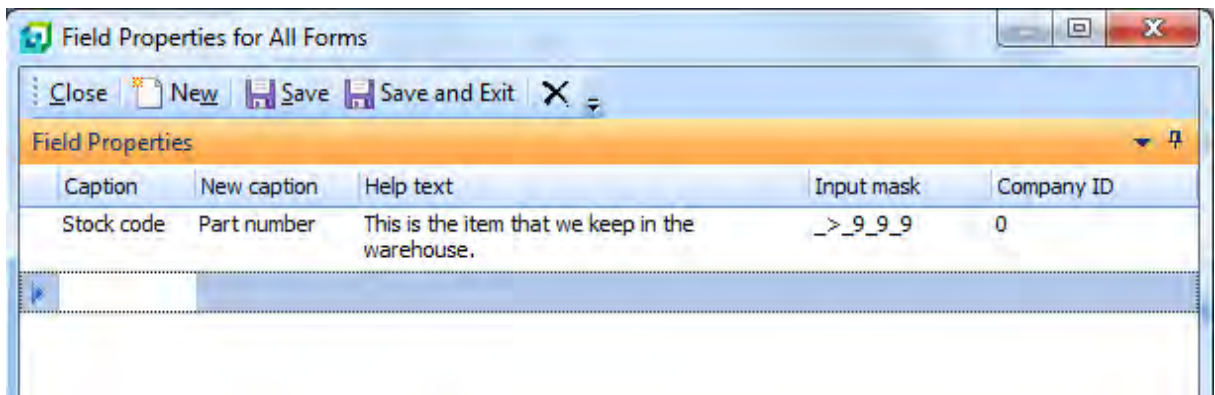
## Field Properties for all Forms

The *Field Properties for All Forms* option has been covered in detail in the chapter on Forms. It can be used to change the captions on all forms system wide, or restricted to only one SYSPRO company ID. The entered caption must exactly match the caption on the form for it to be replaced, although this is not case-sensitive.

If any field within the displayed form has its *Show help automatically* option set within the *Field Properties*, any text that is entered against *Help text* is displayed in a help section at the bottom of that form. In addition, an *Input Mask* can be set for this field. Input Masks were also covered in the chapter on Forms.

**Figure 8-9** shows the *Field Properties for All Forms* program where an entry has been made. The entered caption is *Stock code*, the new caption is *Part number*, and the *Company ID* has been set to zero. All forms in company 0 that contain a caption of *Stock code* will have this caption replaced with *Part number*. If the caption is on an entry form, the input mask will be set to accept a part number of a capital letter, followed by three numbers. If any field on the form has its *Show help automatically* option checked, the text “This is the item that we keep in the warehouse.” will appear in a section at the bottom of this form whenever this field is highlighted.

If SYSPRO is being used in a language other than English, the entries in the *Field Properties for All Forms* must match the captions in the language being used.



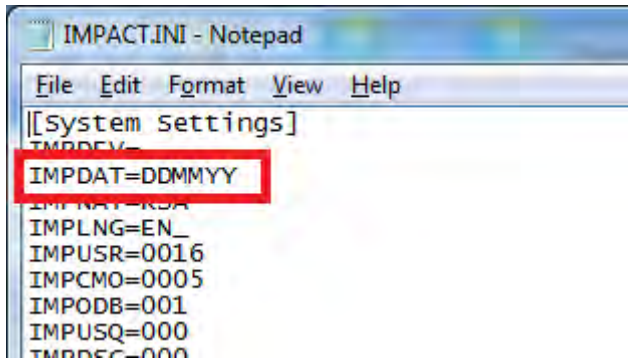
**Figure 8-9:** Adding an entry to the *Field Properties for All Forms* program

## Dates

When logging in to SYSPRO for the first time, the first person to log in is prompted to enter a default date presentation format. Their choices are dd/mm/yy, mm/dd/yy, or yy/mm/dd. This option specifies

the way that dates are displayed/accepted when an operator interacts with SYSPRO. However, SYSPRO always stores its dates in the same format.

If you are outside of SYSPRO, the chosen format can be seen in the *IMPACT.INI* file in the SYSPRO server's *Work* folder (see **Figure 8-10**).

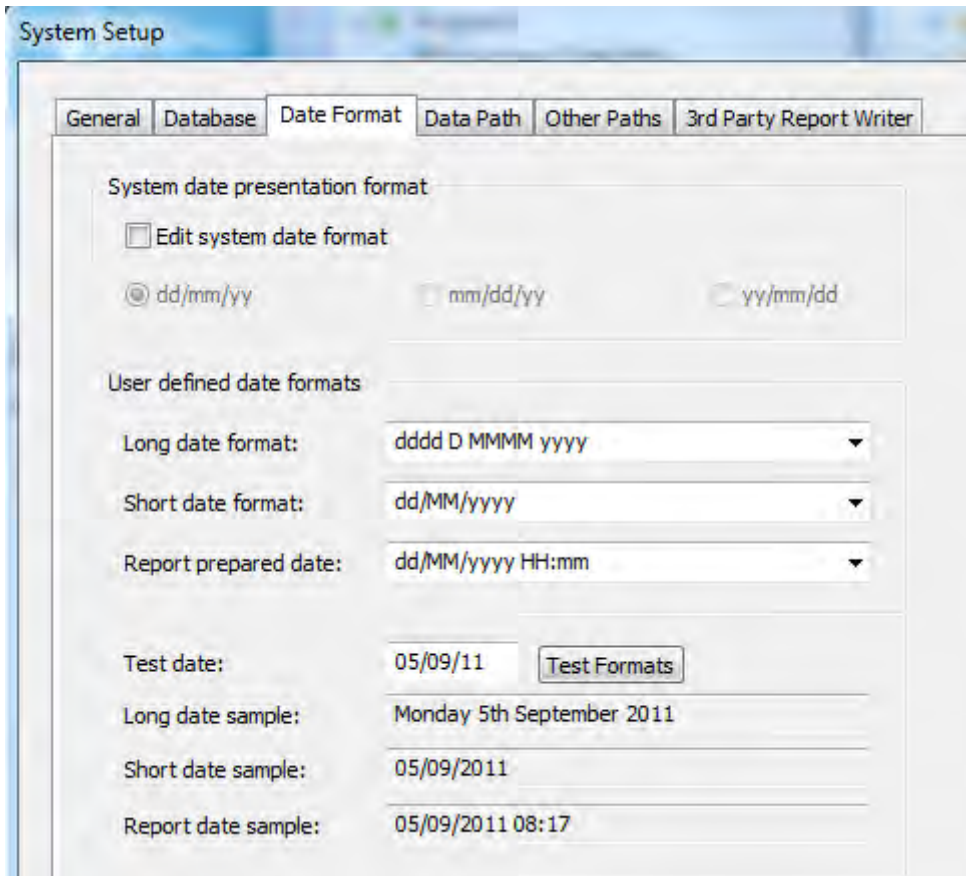


**Figure 8-10:** Viewing the date format in *IMPACT.INI*

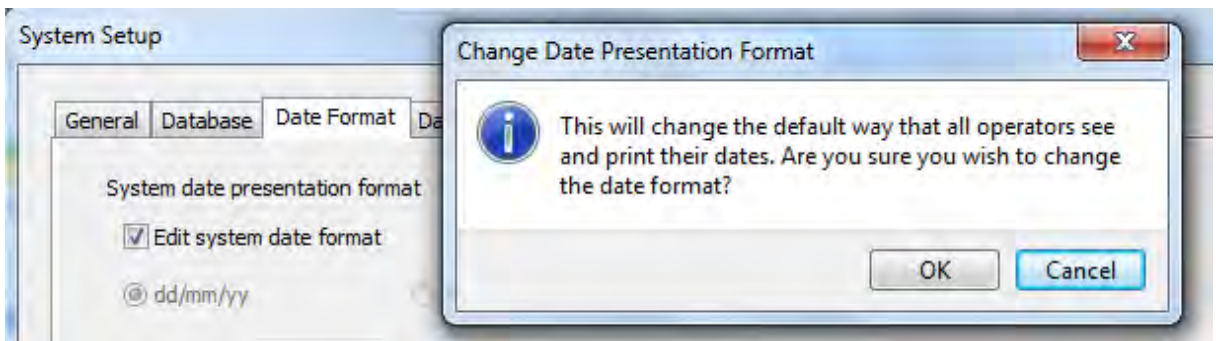
Within SYSPRO, the chosen format can be seen in the *System Setup* program (*Setup | System Setup | Date Format* tab). **Figure 8-11** shows the *Date Format* tab of the *System Setup* program. The *System date presentation format* section appears at the top of the screen and is greyed out.

Below this section is the *User defined date formats* section. The items in this section default to the date format specified above. If changes are made to any of these user-defined date formats, clicking on the *Test Formats* button will refresh the section below it that displays a representation of these dates.

The *Edit system date format* option allows you to change the system date presentation format if you have either entered the wrong format when configuring the system, or your organization has decided to change their system date display format. This is an option that you are unlikely to change. However, if you need to make this change, checking the *Edit system date presentation format* option displays an information message (see **Figure 8-12**). If the *OK* button is selected you will be able to use the radio buttons to select a new date format. At the same time you should set the *Long date format*, *Short date format*, and *Report date format* to match. Clicking on the *Save* button will display a warning message that states that the changes will only come in to effect when you exit SYSPRO.

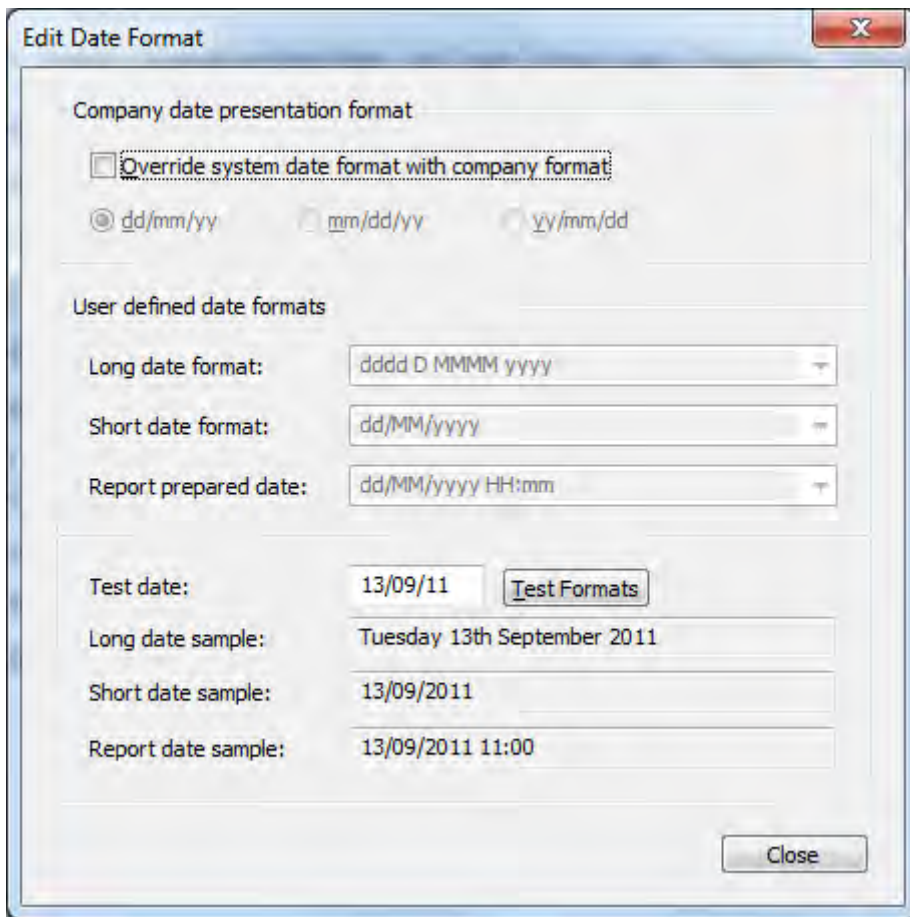


**Figure 8-11:** The *System Setup* program where date formats are viewed/set



**Figure 8-12:** Checking the *Edit system date format* checkbox

It is possible to have different companies running different date formats. This is achieved using the *Edit Date Format* screen within the *Company Setup* program (*Setup | Company Setup | select the company ID and click on the Change button | General tab | Edit Date Format button*). **Figure 8-13** shows the company setup program's *Edit Date Format* screen, which is similar to the *Date Format* tab under the *System Setup* program.



**Figure 8-13:** The company setup program's *Edit Date Format* screen

The *Long date format*, *Short date format*, and *Report prepared date format* options are all greyed out, as they default to the matching entries against the *System Setup* program. Checking the *Override system date format with company format* checkbox enables both the radio buttons and the *User defined date formats* drop down lists. Make the required changes to the company date format and those in the drop down lists. Click on the *Test Formats* button and the samples below it will reflect your

choices, enabling you to validate that you have them correct. Once you have the correct choices, click on the *Close* button. A warning message will be displayed to state that the changes will only take effect when you exit SYSPRO.

## Numeric Formatting

The numeric formatting options are available within the *Company Setup* program (*Setup | Company Setup | select the company ID | Options* tab). **Figure 8-14** shows the relevant options from the *Company Setup* program. The first option contains a drop down list that enables you to specify whether your decimal character is a full stop/period or a comma. Once this is set all values will be displayed this way. When entering values that contain a decimal value, you must use this character when typing in the value (i.e. if this value is set to a comma, when you enter a number that requires a decimal you must type a comma, you can't use a full stop/period).

The screenshot shows a window titled "Numeric formatting" with several sections of options:

- Decimal character:** A dropdown menu currently showing a period ".".
- Style for values:**
  - Use 1000 separators
  - 1000's separator character: A text box containing a comma ",".
  - Number of digits after decimal: A dropdown menu currently showing "2".
- Style for costs/prices:**
  - Use 1000 separators (reports)
  - 1000's separator character (reports): A text box containing a comma ",".
  - Minimum number of decimals to print: A dropdown menu currently showing "3".
- Style for quantities in listviews:**
  - Edit quantities using decimals associated with item

**Figure 8-14:** The numeric formatting options within the *Company Setup* program

The second set of options enables you to specify if there is a thousand separator character and what it is. This is the character that will be used to highlight numbers greater than a thousand. In the number "35,250,900" the thousand separator is set to a comma. You can also specify how many digits appear to the right of the decimal character, either 0 or 2. These settings affect displayed values.

The third set of options enables you to do the same, but for reports. The minimum number of decimals can be set between 2 and 5.

The *Edit quantities using decimals associated with them* option is used to specify whether stock code quantities appearing in listviews are displayed with three decimal places, or whether the number of decimals to use must be taken from the *Maximum number of decimals* field against the stock code.

Against the operator code there are options that can be used to override certain of these settings (*Setup | Security | Operators | highlight operator code and select Edit | Change | Options tab*). **Figure 8-15** shows these settings. These settings are setting the decimal character, the thousands separator for values, and the number of digits after the decimal for values.

Contact management user only		<input type="checkbox"/>
<b>Numeric formatting</b>		
Override company setting		<input checked="" type="checkbox"/>
Decimal character		.
<b>Style for values</b>		
Override company settings		<input checked="" type="checkbox"/>
Use 1000 separators		<input checked="" type="checkbox"/>
1000's separator character		,
Number of digits after decimal		2

**Figure 8-15:** The operator-specific numeric options



## Chapter 9 - Productivity Tools

SYSPRO contains many productivity tools, but only those relating to customization are covered here. *Events* and *Triggers* were available before *Electronic Signatures* and *SYSPRO Workflow Services (SWS)*. They have been included for backwards compatibility. Most of the tasks that you can perform with the *Events* system or the *Trigger* system can be performed by either *Electronic Signatures* or *SWS*, and usually with more granular control. However, *SWS* requires development skills and will not be covered here.

### Events

*Events* monitor the values of certain fields within SYSPRO. They can be configured to perform tasks when predefined levels are met. An event can be configured to perform one or more of the following tasks:

- Send an email
- Run a SYSPRO program
- Run a NetExpress program
- Run an application
- Write to SYSPRO's message inbox

Each event can be configured to write to the event log file at the same time as performing one of the above tasks, or can be configured to only write to this log file.

Events are created and modified using the *Event Management Editor* program (*Ribbon Bar | Customization* section | *Event Management*). **Figure 9-1** shows the *Event Management Editor* with four events already present. From this, program events can be added, changed, or deleted. In addition, you can view the log file (*Functions | View Log File*). A section of a log file can be seen in **Figure 9-2**.

By default, the log file displays all events and you can use the *Start at* option (*File | Start at*) to only display log entries from a specific date onwards. If you select the option to print the log file (*File | Print*) a screen of selection criteria is displayed so that you can reduce the size of the report.

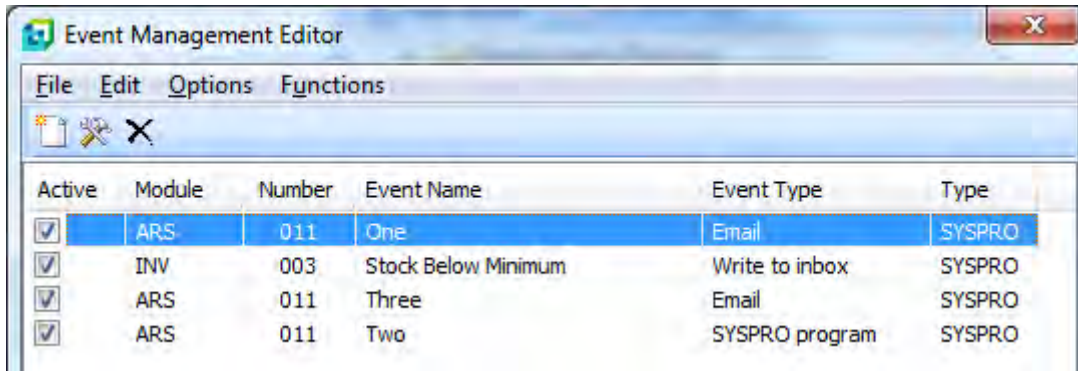


Figure 9-1: The *Event Management Editor*

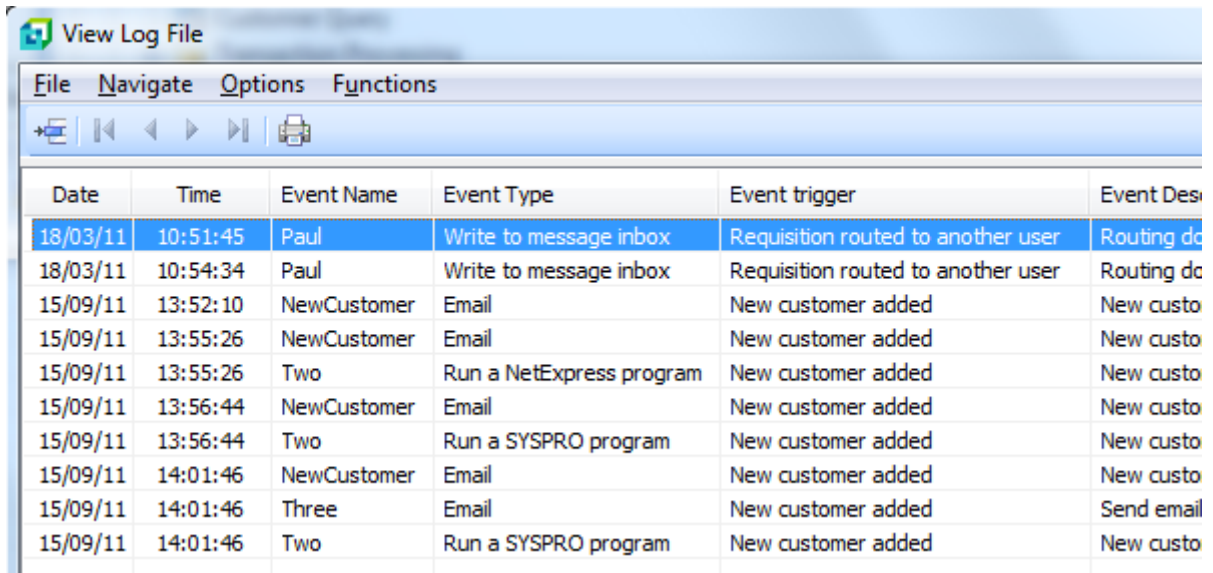


Figure 9-2: The *View Log File* screen

The *Navigate* option against the log file enables you to move to the first entry, the last entry, move forward one screen, or move back one screen. The *Display Options* screen (*Options | Display Options*) enables you to enter selection criteria and only items matching this will be displayed. The *Purge* function (*Functions | Purge*) enables you to remove all log entries that were created before the specified date and indicate whether entries that have not been printed must be purged.

Events are added from the *Events Management Editor* screen by clicking on the *Add* button, or selecting *Add* from the toolbar (*Edit | Add*). The *Add Event* screen is displayed (see **Figure 9-3**).

**Figure 9-3:** The *Add Event* screen

Each event requires a user-defined unique *Name*, which can be up to 20 characters. You can see the event name as the fourth column in the *Event Management Editor* screen in **Figure 9-1**. This listview sequences the list of events based on this field.

The *Select Event* button is used to display a list of available events, which are displayed by module (see **Figure 9-4**). The contents of the *Event* column is the condition under which it fires. Each event has a unique number against it and a type, which is either *SYSPRO* or *e.net*. Events with the type of

SYSPRO will fire if the condition was caused by a SYSPRO program, and those with *e.net* will fire if the condition was caused by an e.net Solutions business object. The e.net Solutions events have the same *Type* entries available as SYSPRO events, except that they don't include *Run a SYSPRO program* option.

The screenshot shows a window titled "List of Events" with a table containing the following data:

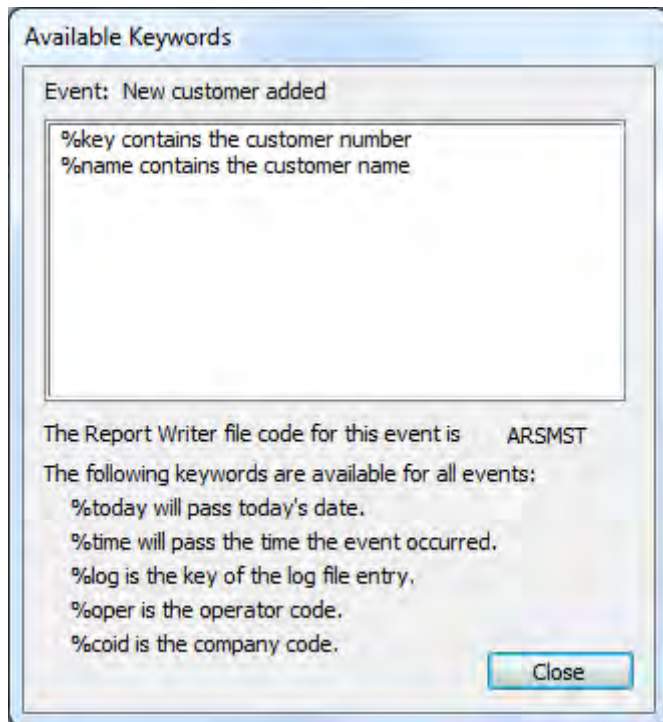
Module	Event	Number	Type
AP events	New supplier added	013	SYSPRO
	Supplier balance > parameter	012	SYSPRO
AR events	New customer added	011	SYSPRO
	Customer balance > % of credit limit	009	SYSPRO
	Customer now within credit limit	010	SYSPRO
	Customer balance > parameter	025	SYSPRO
	Customer placed on hold	044	SYSPRO
	Customer released from hold	045	SYSPRO
Assets events	Minimum book value reached	043	SYSPRO
	Capex budget exceeded on line addition	049	SYSPRO
	Capex budget exceeded on line approval	050	SYSPRO
	Capex budget exceeded on line spending	051	e.net
	Capex spending on line not approved	052	e.net
	Capex spending on closed line	053	e.net
Cash Book events	Bank balance < parameter	008	SYSPRO
GL events	G/L Ytd actual > Ytd budget by % parameter	016	SYSPRO
Inventory events	New stock item added	007	SYSPRO

At the bottom of the window are three buttons: "Explain...", "Select", and "Close".

**Figure 9-4:** The *List of Events* screen

Highlighting an event and clicking on the *Explain* button provides a list of keywords that are available for use in the command line/email for the currently highlighted event (see **Figure 9-5**). Keywords are replaced by the corresponding value when the event is fired. For example, if your event is to send an email when a supplier is added (and the subject line or email body contains the keyword *%key*) the *%key* variable will be replaced with the new supplier's number when it is fired. So a subject line of

*Supplier %key has been created* will be changed to *Supplier 0001118 has been created* when the event fires after the creation of supplier 0001118.



**Figure 9-5:** The *Available Keywords* screen that is displayed when you click on the *Explain* button

Back on the *List of Events* screen, highlight the event and click on the *Select* button; the *List of Events* screen will be closed and the selected event name will populate the *Event* prompt.

Against the *Description* prompt you can add a description of up to 100 characters. This description will appear in the *Event Description* column of the event log. If the selected event requires a parameter to validate against (such as the event *Supplier balance > parameter*) the parameter prompt will also appear on the screen and you should enter the appropriate parameter value.

The *Write to log* option specifies whether the firing of this event must be added to the log file. If the *Write to log only* type is selected, the *Write to log* checkbox must be selected and if you attempt to uncheck it you will get a warning message. If you change the event type to *Write to log only* when the *Write to log* checkbox is unchecked, it will become checked automatically.

The *Active*, *From* and *To* options work in conjunction to specify when an event may be fired. Only events with the *Active* checkbox checked can be fired. The *From* and *To* dates specify a date range within which the event can be fired. These dates are inclusive, which means that if the current date is either the same as the *From* date (or the *To* date) the event is eligible to fire providing that the *Active* checkbox is checked.

The *Save* button is used to save the current event. The *Cancel* button is used to exit the *Add Event* screen without saving and the *Check Names* button is used to validate the email names/addresses and is only available if the *Type* is set to *Email*.

From the *Type* dropdown list, select the action that you want the event to perform. The available actions are :

- Send an email
- Run a SYSPRO program
- Run a NetExpress program
- Run an application
- Write to log only
- Write to SYSPRO's message inbox

The remaining options on the screen will be different depending on which *Type* is selected. Each is covered here under a separate subheading.

### Email

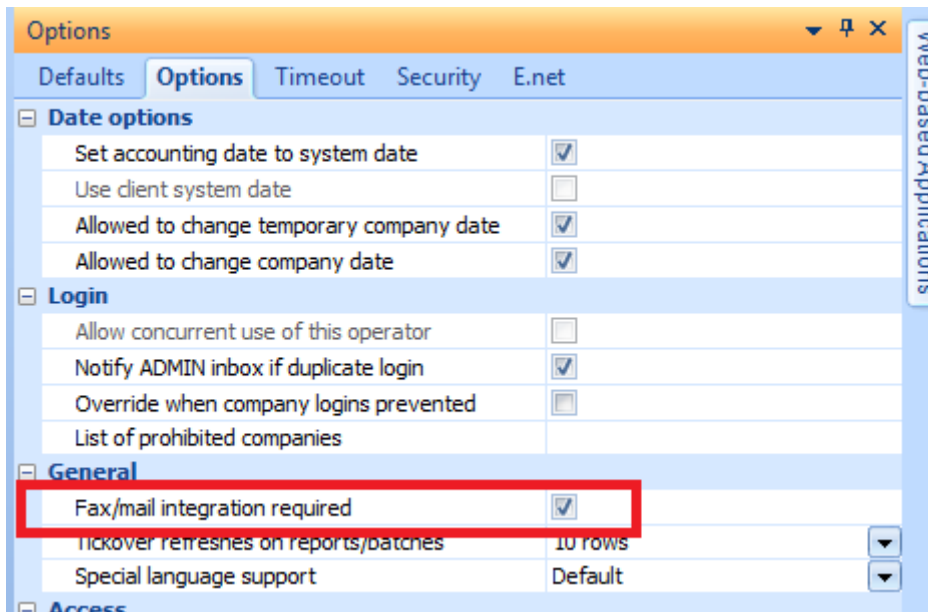
To be able to configure an email event and save it, the operator must have the *Fax/mail integration required* option checked against their operator code as seen in **Figure 9-6** (*Ribbon bar | Setup tab | Security section | Operators | highlight the operator code | Edit | Change | Options tab*).

If this option is not checked, the message *You cannot enter Email trigger events if Fax/mail integration is not required* is displayed when you click on the *Save* button (see **Figure 9-7**).

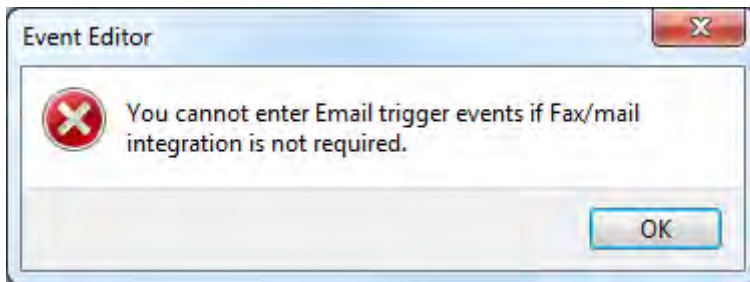
For email events there are three fields that can have information entered against them. The first is *To*, which is where you enter the recipient's name or email address. If more than one email address is required, the addresses are separated by semi-colons (;). The second field is *Subject*, which is where you enter the email subject line. You can enter keywords against the *Subject* field, which will be replaced with the corresponding values when the event fires. The third field has no name, but contains the body of the email. Like in the subject field, keywords can be entered here and they will be replaced with the corresponding values when the event fires.

Additional email fields may be present depending on which event is selected. For example, if the *Goods receipt* event is selected, the *Notify buyer* and *No default Email recipient* checkboxes appear

along with the *Conditional Email by List* button. If the *Requisition routed to another user* event is selected, the *Notify user* checkbox appears.



**Figure 9-6:** The *Fax/mail integration required* option against the operator



**Figure 9-7:** Message warning that fax/mail integration is required for email events

If the *Notify buyer* checkbox is checked the email address against the buyer code for this purchase order is added to the *To* list when the goods are received.

If the *Notify user* checkbox is checked the email address associated with this requisition user is added to the *To* list when the requisition is routed to another user.

The *Conditional Email by List* button is used to specify which email addresses should receive the email depending on supplied conditional logic (such as “if the warehouse is E, the email address is Joe@Outdoors.com”). If the *Conditional Email by List* button is selected, the *Event Mail Selections* listview is displayed. Any conditions already configured for this event will be displayed. You can have multiple conditional entries for each event.

To add a new entry, select the *Add* button to display the *Event Mail Selection Maintenance* screen. The *Module*, *Event Number*, *Event Name*, and *Line Number* will be pre-populated with the information for this event (see **Figure 9-8**).

The screenshot shows a window titled "Event Mail Selection Maintenance" with the following fields and values:

- Module: INV
- Event Number: 001
- Event Name: SSSSS
- Line Number: 0001
- Expression: %wh = "E"
- To... button
- Recipient List: Joe@Outdoors.com
- Check Names... button
- Save button
- Close button

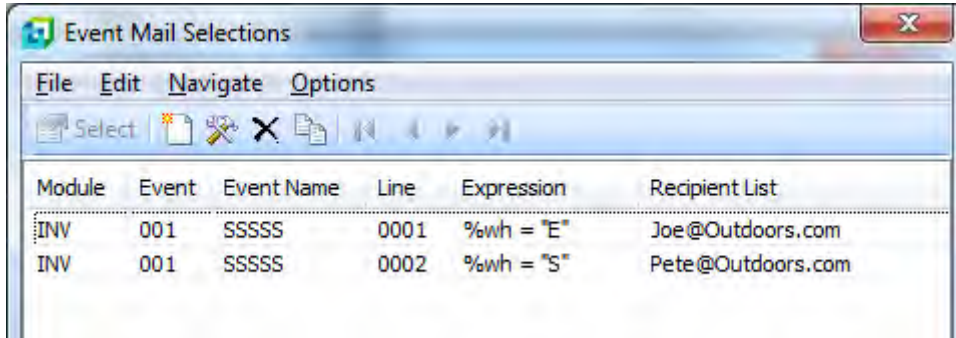
**Figure 9-8:** The *Event Mail Selection Maintenance* screen

At the *Recipient List* prompt, you add the email addresses that should receive this email. At the *Expression* prompt, you add the condition under which the email should be sent to these email addresses. The expression can contain keywords such as *%wh* for the warehouse and *%oper* for the operator code. The *Expression* field can contain several parts that are linked with the *AND* operator. For example:

*%wh = "E" AND %oper = "JOE"*



If the conditions are met against multiple of these expressions, the email is only sent to the addresses against the first one that is matched. So if there is a chance that multiple of these conditional entries might be met, you should add them in the sequence that would send the email to the correct recipient. **Figure 9-9** shows two conditional entries for the *Stock above maximum* event. If the warehouse where the stock item has gone above the maximum stocking levels is *E*, the email will be sent to *Joe*. If the warehouse is *S*, the email will be sent to *Pete*.



The screenshot shows a window titled "Event Mail Selections" with a menu bar (File, Edit, Navigate, Options) and a toolbar. Below the toolbar is a table with the following data:

Module	Event	Event Name	Line	Expression	Recipient List
INV	001	SSSSS	0001	%wh = "E"	Joe@Outdoors.com
INV	001	SSSSS	0002	%wh = "S"	Pete@Outdoors.com

**Figure 9-9:** Multiple conditional entries

Back on the *Change Event* screen, if the *No default Email recipient* checkbox is unchecked, you must specify an email address against the *To* field. If the conditional logic indicates that another recipient must be notified, they will be notified too. In the above example, if the *To* field contains *Steve*'s email address and the warehouse is *E*, both *Steve* and *Joe* will receive the email. If the warehouse was not *E* or *S*, only *Steve* would receive the email. If the *No default Email recipient* checkbox is checked, the emails will only be sent if they match one of the conditions, and then only to the email address specified against the condition.

### Run a SYSPRO Program

A *Run a SYSPRO Program* event is used to call up a SYSPRO program when the event's condition is met. The majority of the options on the screen have been covered above. The two that haven't are *Program name* and *Description*.

The program name can be manually entered against the *Program name* prompt if it is known. Alternatively, click on the browse button and a screen will be displayed that has a list of modules in the left pane and the list of programs in the right pane that match the selected module (see **Figure 9-10**).

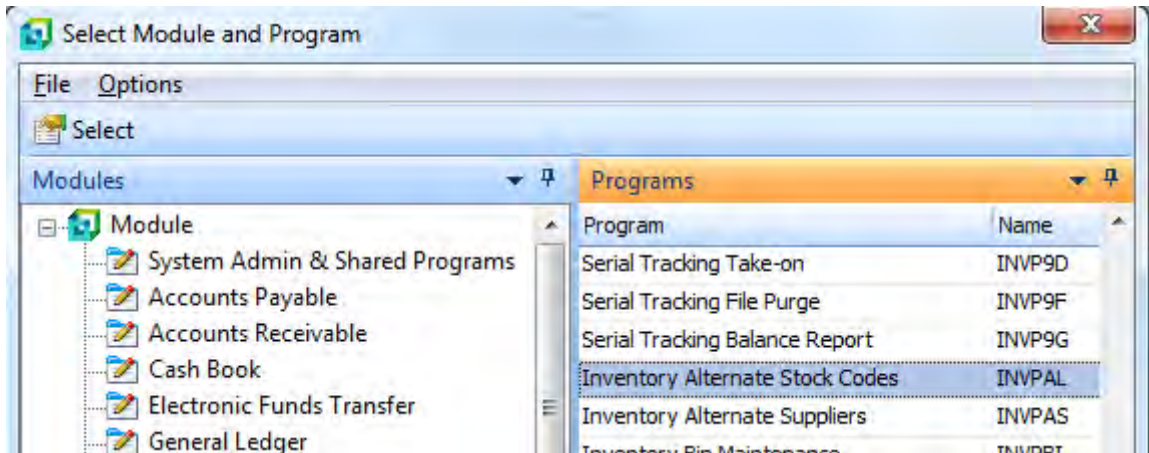


Figure 9-10: Selecting the program name

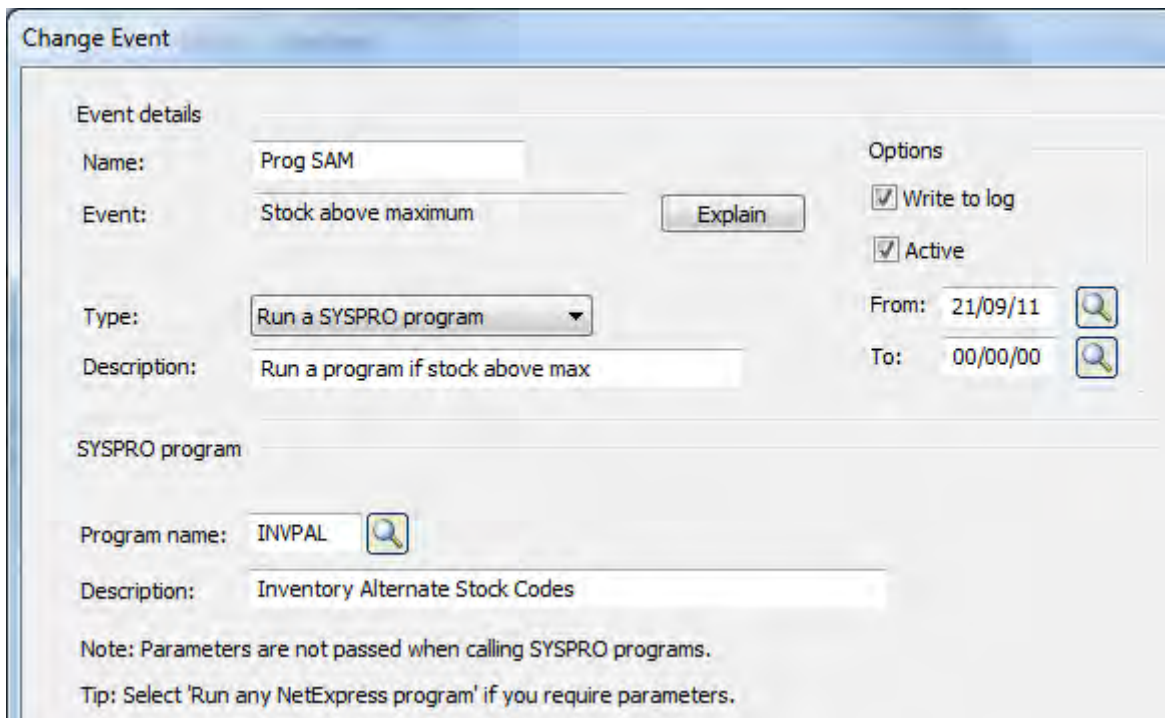


Figure 9-11: The event screen with the program name and description populated

Because some programs are called from multiple places, they may not appear against the module you would expect to find them. An example of this is the *Sales Order Entry and Maintenance* program (*IMPO40*). In this case you should look in the *System Admin & Shared Programs* section. Once you have located the required program name, you can either double-click on it or highlight it and click on the *Select* button on the toolbar. You will be returned to the previous program and the *Program name* field will be populated with the name. The *Description* field will be populated with the program description which you can change (see **Figure 9-11**).

This type of event cannot pass parameters to the called program. If multiple events have been configured to call a SYSPRO program when this condition occurs, they will be fired in the sequence in which they appear in the *Event Management Editor* listview (alphabetical sequence by the event name).

### Run any NetExpress Program

A *Run any NetExpress Program* event is very similar to a *Run a SYSPRO Program* event. The difference is that you must specify the program name and its location in relation to the SYSPRO server. If the Net Express program has been written using standard SYSPRO techniques, the field LINK-EXTRA will contain the key of the code that triggered it (the same value that would appear in *%key* if it was an email event). For events that are based around inventory movements, LINK-EXTRA will contain both the stock code and the warehouse. For alphanumeric stock codes, the stock code will be padded with spaces up to its full size, followed by the warehouse code.

### Run an Application

A *Run an application* event is used to call an application that can be run on its own, and optionally pass it parameters. **Figure 9-12** shows the event capture screen after an application has been configured.

If you use the browse button to locate the application it will only display applications that have a suffix of .exe. However, if your application name does not have a .exe suffix you can use the browse button to locate the correct folder. Type in the application name including the suffix and click on the *Open* button. The entry against the *Start in* prompt specifies the folder that you will reside in when the application is run. If the application creates files, but does not include a path for the created file, the file will be created in the *Start in* folder. In addition, if the application resides in the *Start in* folder it means that you can remove this path from the *Command line*, as has been done in **Figure 9-12**. This makes it easier to see the whole command including its parameters.

**Change Event**

**Event details**

Name:

Event:

Type:

Description:

**Options**

Write to log

Active

From:

To:

**Application**

Description:

Command line:

Start in:

Tip: You can use reserved words such as %key, %coid, %oper in the command line.  
 Tip: In a client/server environment the application must reside on the client.  
 Tip: When defining a path to an application you must surround it in quotes if it is spacey.  
 Use the the 'Explain' function to view available keywords.

**Figure 9-12:** A *Run an application* event screen

### Write to log only

The *Write to log only* option just writes to the log file. If the *Write to log only* option is selected the *Write to log* option must be checked. If you attempt to uncheck it, a message to this affect will be displayed. If you are changing the *Type* from another to *Write to log only* (and the *Write to log* checkbox is unchecked) it will become checked automatically.

### Write to message inbox

The *Write to message inbox* event is used to write messages to an operator's message inbox within SYSPRO. There are five options within the *Message inbox details* section that affect what is written to the message inbox. The first is *Subject text* which allows up to 40 characters to be entered as the message. This can include keywords, which are expanded when the event fires. The second option is the operator code to be notified and a valid operator code must be supplied. The *Program to run* is optional and used to call a SYSPRO program if the operator receiving the message double-clicks on it.

The next option is *Post messages with today's date*. If checked, this option will add one entry to the message inbox for each time the event is fired. If unchecked, only one entry will appear in the message inbox for this event for this day, no matter how many times it is fired. The last one fired is always displayed.

The *Prevent duplicate message being displayed* will only allow one message to be displayed. Duplicate messages are those where the *Subject text* and *Program to run* are the same.

## Triggers

*Triggers* are similar to *Events*, but where events are typically when certain criteria are reached; triggers are typically around specific tasks being performed. There is some overlap between events and triggers, such as the event *New customer added* and the trigger *After customer added*, so you could use either. Triggers also don't write to a log file.

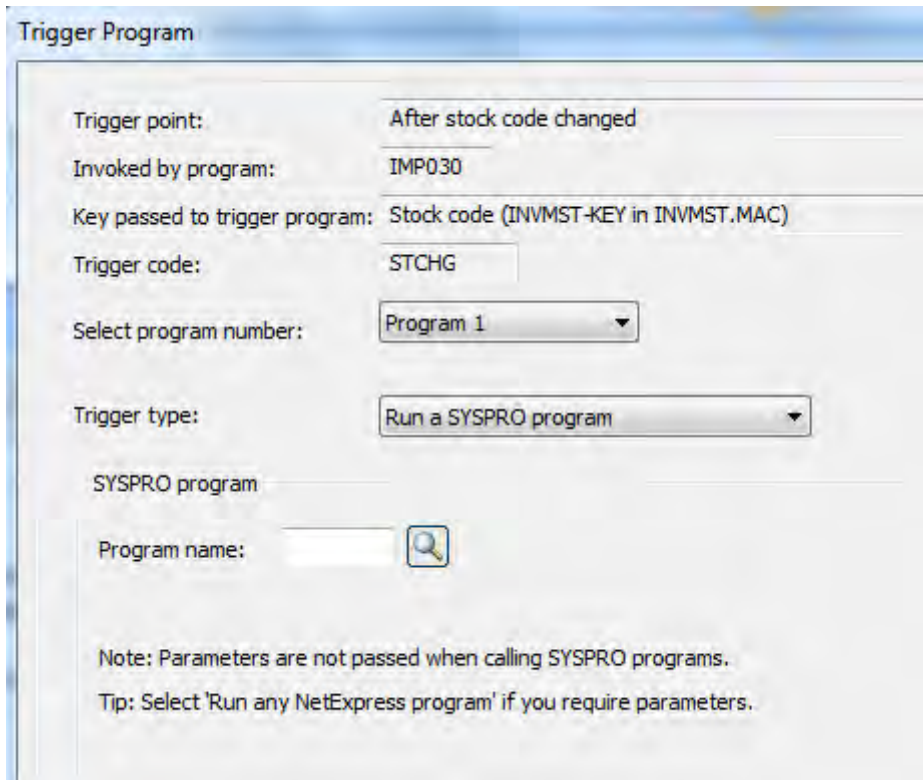
With an event you can only perform one task, but you can have multiple of the same event configured. A trigger can be configured to perform up to nine tasks (called *Programs*) but you can't configure multiples of the same trigger.

The available *Trigger types* are:

- Run a SYSPRO program
- Run a SYSPRO customized report
- Run any NetExpress program
- Run any application
- Write to SYSPRO's message inbox.

Each trigger can have up to nine *Programs* configured against it (*Program 1* to *Program 9*). These are entered in sequence, and will be the sequence in which they are fired. **Figure 9-13** shows the screen that appears when adding a trigger. What appear to be prompts at the top of the screen are pre-populated with information matching the trigger that was selected, and can't be changed. Against *Key passed to trigger program* is what will be passed in the *%Key* parameter when the program is run. In the example in **Figure 9-13** it is the stock code, but the key to some triggers contains multiple parts. For example, all of the triggers relating to sales order detail lines contain both the sales order and line numbers.

Against the *Select program number* prompt is a dropdown list containing *Program 1* to *Program 9*. As you add entries they will use the next program number, no matter which number you added them against. So, if you added *Program 9* as the first entry, this will be changed to be *Program 1* automatically. These program numbers are used to modify an existing program, or to add a new one after the highest numbered existing entry. The rest of the prompts are specific to the *Trigger type* that has been selected.



Trigger Program

Trigger point: After stock code changed

Invoked by program: IMPO30


Key passed to trigger program: Stock code (INVMST-KEY in INVMST.MAC)

Trigger code: STCHG

Select program number: Program 1

Trigger type: Run a SYSPRO program

SYSPRO program

Program name:  

Note: Parameters are not passed when calling SYSPRO programs.

Tip: Select 'Run any NetExpress program' if you require parameters.

**Figure 9-13:** Adding a *Trigger*

### Run a SYSPRO program

As mentioned above, up to nine *Programs* can be configured against each trigger. If one of these *Programs* is of the type *Run a SYSPRO program*, it must always be the last one. Any that you attempt to add after a SYSPRO program will be ignored when you save the trigger. So, by implication, you can only call one SYSPRO program.

If you know the program name you can type it in at the *Program name* prompt. Alternatively, there is a browse to locate the program name. Clicking on the browse button displays the *Select Module and Program* screen, which contains a list of modules in the left hand pane and a list of programs matching this module in the right hand pane. If you select the module and you do not find the program in the matching list, select the *System Admin & Shared Programs* module, as several programs are called from multiple places and will appear against this module name.

### Run a SYSPRO customized report

The *Run a SYSPRO customized report* option will run a SYSPRO Report Writer report and optionally pass it parameters. When this option is selected you provide the *Report code* (either by typing it in, or selecting it from the browse). In the section below, the report code is a list of variables that can be used in your report. The variable *%Key* is always available, the others are specific to the trigger being configured. In the case of a trigger that fires when a customer is added, the available variables are *%Key* and *%Customer*. In this case they both contain the account number of the newly-added customer. In the case of the *After purchase order receipt* trigger the *%Key*, *%PurchaseOrder*, and *%Line* variables are available. The *%Key* variable contains the purchase order and line number; the *%PurchaseOrder* variable contains the purchase order number; and the *%Line* variable contains the purchase order line number.

If user defined run time variables matching these variable names exist in the report writer report, the value assigned to the variable in the trigger is passed to the report. Note that the variable names in the report must exactly match those against the trigger, and they are case-sensitive.

An example of this is where a report writer report must be run when a new customer is added, and the report must only contain information for this newly-added customer. The report can be designed to use a run time variable that restricts which customers are included in the report. If this variable is called *%Key*, the value contained in the trigger's *%Key* variable will be passed to the report's *%Key* variable at run time.

### Run any NetExpress Program

A *Run any NetExpress program* trigger is very similar to a *Run a SYSPRO Program* trigger. The difference being that you must specify the program name and its location in relation to the SYSPRO server. If the path is not provided, SYSPRO will look for this program in the SYSPRO program folder. If the Net Express program has been written using standard SYSPRO techniques, the field LINK-EXTRA will contain the key specified against the trigger's *Key passed to trigger program* field. For triggers that are based around inventory movements, LINK-EXTRA will contain both the stock code and the warehouse. For alphanumeric stock codes, the stock code will be padded with spaces (up to its full size) followed by the warehouse code.

### Run an Application

A *Run an application* trigger is used to call an application that can be run on its own, and optionally pass it parameters. You can use the browse against the *Command line* prompt to locate the application and, once highlighted, use the *Open* button to select it. The entry against the *Start in* prompt specifies the folder on the server that you will reside in when the application is run. If the application creates files, but does not include a path for the created file, the file will be created in the *Start in* folder. In addition, if the application resides in the *Start in* folder, it means that you can remove the path from the *Command line*. This makes it easier to see the whole command with its parameters. The available parameters are: *%key %coid, %oper, and %code*. The *%key* variable will contain whatever is described against *Key passed to trigger program*, *%coid* will contain the company ID,

*%oper* will contain the operator code; and *%code* will contain the string against *Trigger code*. In the case of **Figure 9-13** this would be the text *STCHG*.

### Write to message inbox

The *Write to message inbox* trigger is used to write messages to an operator's message inbox within SYSPRO. There are five options within the *Message inbox details* section that affect what is written to the message inbox. The first is *Subject text* which allows up to 40 characters to be entered as the message. This can include keywords, which are expanded when the event fires. The second option is the operator code to be notified and a valid operator code must be supplied. The *Program to run* is optional and used to call a SYSPRO program if the operator receiving the message double-clicks on it.

The next option is *Post messages with today's date*. If checked, this option will add one entry to the message inbox for each time the trigger is fired. If unchecked, only one entry will appear in the message inbox for this trigger for this day, no matter how many times it is fired. It will always be the last one fired that is displayed.

The *Prevent duplicate message being displayed* will only allow one message to be displayed. Duplicate messages are those where the *Subject text* and *Program to run* are the same.

## Automation

The automation facility allows certain programs to be run automatically, using either predefined, or default values. These programs can be scheduled to run unattended, at a date and time that suits the operator/administrator. Typically, these are balance/period end programs as well as programs that require access to many data files or tables to run, such as the *Requirements Calculation* program of the *Requirements Planning* module. A full list of the programs that can be automated can be seen in the *Automation Design* program (*Ribbon Bar | Home tab | Automation Design* option within the *Administration* section).

The predefined values are added while in design mode, or through the *Automation Design* program. As you can create more than one set of predefined values per SYSPRO program, you can assign each one a group name. Providing meaningful group names makes it easier to know what process is being performed. For example, the group names could be DAILY, WEEKLY, MONTHLY and AdHoc.

The predefined values are stored in an XML file the name of which includes the form name. The XML file is stored within a folder named after the group, under the `base\settings` folder on the server. The group name must conform to folder naming rules on the server. The XML files for all programs with the same group name will be stored in the same folder. When the program is run you can specify that it must be run with one of these predefined sets of values, or using the default values.



**Design Mode (setting predefined values)**

Many of the programs that can be automated will display different options depending on when they are run. For example, if you run the *AR Period End* program during the middle of the year you will be presented with the current *Processing* options that won't include the *Year End* options as they are not available mid-year (see **Figure 9-14**).

The screenshot shows the 'AR Period End' window. At the top, there are buttons for 'Start Processing', a printer icon, and 'Save Form Values'. Below this is an 'Information' section with a dropdown arrow and a pin icon. Underneath is a 'Control details' section with two rows: 'Current month number' with the value '02' and 'Period end date' with the value '30/04/2010'. The 'Processing options' section is expanded, showing a 'Function' label on the left and four radio button options on the right: 'Balance' (selected), 'Month end only', 'Month end and purge', and 'Purge only'. At the bottom, there are two checkboxes: 'Reset customer credit status' and 'Reset lowest unprocessed journal', both of which are unchecked.

**Figure 9-14:** Running the *AR Period End* program during the year

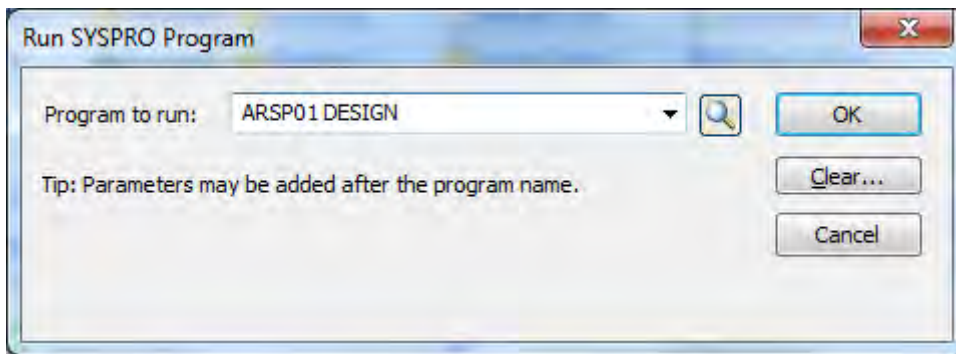
The screenshot shows the 'AR Period End' window in design mode. It has the same layout as Figure 9-14, but the 'Processing options' section is expanded to show six radio button options: 'Balance' (selected), 'Month end only', 'Month end and purge', 'Year end only', 'Year end and purge', and 'Purge only'. The 'Control details' and 'Reset' checkboxes remain the same as in the previous screenshot.

**Figure 9-15:** Running the *AR Period End* program in design mode

When the same program is run in design mode, all of the options are available to be selected. **Figure 9-15** shows the same program run in design mode. The *Year end* options are present; the *Save Form Values* button is enabled; and the *Start Processing* button is disabled, so the program cannot be executed.

There are two ways to run a program in design mode. The first is using the *Run* option (*SYSPRO* button | *Run a Program*) or using the *Ctrl + R* keyboard shortcut keys, and the second is using the *Automation Design* program, which will be covered below.

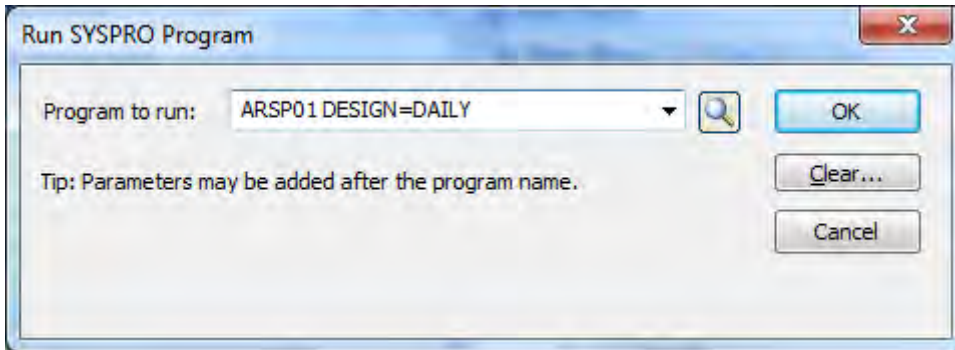
If the *Run* option is used, the *Run a SYSPRO Program* screen is displayed. If you already know the program name you can manually enter it followed by a space and the word *DESIGN*. Whatever is entered against the *Program to run* prompt is automatically converted to uppercase as it is typed (see **Figure 9-16**).



**Figure 9-16:** Running the *AR Period End* program in design mode

If you do not know the program name, you can click on the browse button and the *Select Module and Program* screen is displayed. Locate the program within the relevant module using its description, remembering that if the program is called from many locations it may appear in the *System Admin & Shared Program* section. If you double-click on the program, or highlight it and use the *Select* button, the program name will be passed to the *Program to run* prompt and executed. This is not what is required, so note the program name and close the *Select Module and Program* screen. At the *Program to run* prompt, type in the name followed by the word *DESIGN*.

If you want to create predefined values for a group, add an equals sign and the group name to the end of this command. **Figure 9-17** shows the command to run the *AR Period End* program in design mode for a group called *DAILY*.



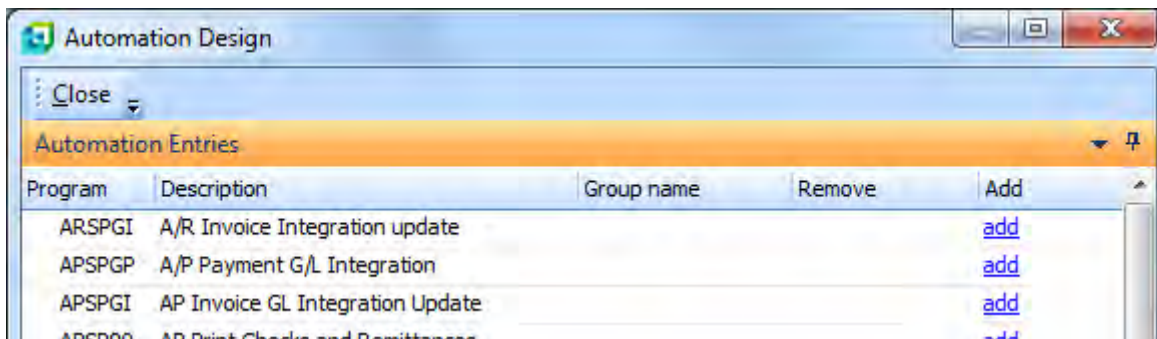
**Figure 9-17:** Running the *AR Period End* program in design mode for a group called *DAILY*

Once in design mode, select the options that should be used for this run of the program. If the program populates a listview with summary/processing data, you can choose to print the contents of the listview, and/or email the contents to one or more email addresses. The emailed attachment will be an HTML file. To use the email facility, the operator code that is used to invoke the program when it is being automated must have the option *Fax/mail integration required* checked (*Ribbon bar | Setup tab | Operators | select operator | Edit | Change | Options tab*). If the operator does not have this option checked, a message to this affect will be displayed when the automation happens. You can also specify whether the program should automatically close after it has completed. When you have finished setting the predefined values you should click on the *Save Form Values* button on the toolbar and exit the program.

### Automation Design

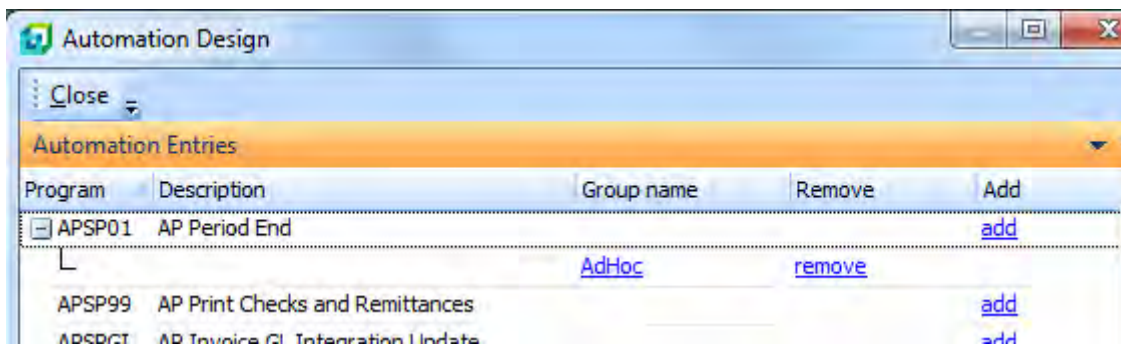
The *Automation Design* option enables you to easily create predefined group automation files. The *Automation Design* option appears within the *Administration* section of the *Home* tab of the ribbon bar.

The automation design screen consists of a listview with *Program*, *Description*, *Group name*, *Remove*, and *Add* columns. If no group automation entries exist, the *Group name* and *Remove* columns will be empty. The *Program* column will contain the program names of programs that can be automated; the *Description* column will contain the matching program description, and the *Add* column will contain the hyperlinked text *add* (see **Figure 9-18**).



**Figure 9-18:** The *Automation Design* program

Locate the program to be automated and click on the *add* hyperlink. You will be prompted for a group name, which you should enter and then click on the *OK* button. Note that the group name cannot contain special characters such as slashes, question marks, pipe signs, spaces, etc. The selected program will be run in design mode (so all the prompts are displayed). Once the prompts are populated with the required values, click on the *Save Form Values* button on the toolbar, and close the program. You will be returned to the *Automation Design* program; the new group entry will appear below the selected program; and the *Remove* column will contain a *remove* hyperlink (see **Figure 9-19**).



**Figure 9-19:** The *Automation Design* program containing the *AdHoc* group automation to *AP Period End*

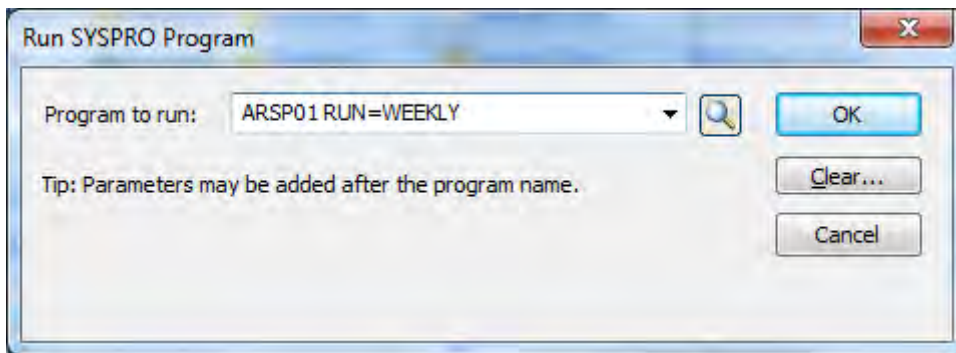
Clicking on a hyperlink in the *Group name* column causes the program to be called up in design mode for this group. Clicking on the *Remove* hyperlink against this entry deletes it. All the normal listview facilities are available within the *Automation Entries* listview of the *Automation Design* program, such as sorting by a column header, setting the *Row Count*, *Best Fit*, *Alternate Row Coloring*, etc.

## Setting Default Values

You can set the default values for all entry forms of programs that can be automated. This can be done for the current operator, or for the current operator/company combination. This is configured by calling up the program (this can be in design mode). Set the values as required, then right-click on the form and select *Options, Save Form Values as Default* (or *Save Form Values for this Company* if you only want the defaults for the current operator/company combination). These will become the new defaults under these circumstances. However, if the program is run in *Run* mode, the settings for the supplied group will override the defaults.

## Run Mode

When you run a SYSPRO program in *Run* mode it can either be to use a group setting, or use those created in design mode with no group name. **Figure 9-20** shows the *AR Period End program (ARSP01)* being run with the *RUN* parameter and the group name of *WEEKLY*. This will run the *AR Period End* program with the settings created either in design mode (or using the *Automation Design* program) for the group *WEEKLY*. If the *Program to run* just contained *ARSP01 RUN*, it would use the settings created when running the *AR Period End* program in design mode, but without specifying a group name.



**Figure 9-20:** Running the *AR Period End* program using the *WEEKLY* group

When you click on the *OK* button the application will start processing; you do not need to click on the *Start Processing* button within the program. When the program has finished it will either stay open or close, depending whether the *Close this application* checkbox is checked or not. The contents of the listview can be configured to be printed or emailed.

## Automation Using IMPAUT

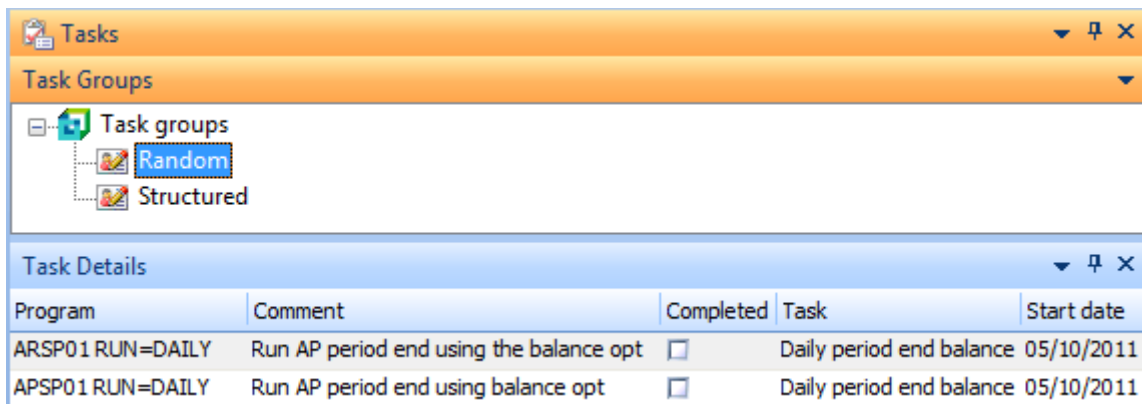
*IMPAUT* is a means of running SYSPRO and passing it parameters to run a specific program. The parameters include the operator code, password, company, program to run, etc. One of the parameters that can be passed is that the program should be invoked in *Run* mode with a group name. This information is passed in the */link=* parameter. An example appears below.

```
C:\SYSPRO61\BASE\IMPAUT.EXE /h /oper=ADMIN /comp=0 /Prog=ARSP01 /link=RUN=DAILY
```

The supplied group name (in the above example this is *DAILY*) is not case-sensitive, unless running in a UNIX environment.

## Running Task Groups

Tasks in the task system are put into groups. In **Figure 9-21**, the task group *Random* contains two tasks. When tasks are added to a task group there are options to assist in supplying an automation group.



**Figure 9-21:** Task Groups with corresponding Task Details

**Figure 9-22** shows the screen that is displayed when adding or editing a task. The program name *ARSP01* was added against the *Program* prompt and the *Description* and *Program type* were populated automatically.

If the automation group settings have already been created (either using the *Automation Design* program, or by running the program in design mode) you can add the *RUN=* followed by the group name directly after the program name.

However, if group settings have not been created you can supply the group name against the *Group name* prompt and the *Define Form* button will be enabled. Clicking on this button will run the specified program in design mode for this group. Once you have made your selections within the program, you can click on the *Save Form Values* and exit back to the *Task* screen. Clicking on the *Run this task using automation* button will add the *RUN=* followed by the group name to the *Program* prompt for you.

Task

Associated with group: Random

General Recurring

Task: Daily period end balance

Start date: 05/10/11

Comment: Run AP period end using the balance opt

Program details

Select Program

Program: ARSP01 RUN=DAILY

Description: AR Period End

Program type: SYSPRO program

Automation form values

Group name: Define Form...

Run this task using automation Automation Design...

**Figure 9-22:** Creating a task that contains a group name

Alternatively, instead of using the *Define Form* button you can use the *Automation Design* button which uses the *Automation Design* program, as explained above. When you have finished with the *Automation Design* program you use the *Close* button to return to the *Task* screen. You can add the group name to the *Group Name* prompt and click on the *Run this task using automation* button for *RUN=* followed by the group name to be added to the *Program* prompt.

You can automate the process of running the task group using *IMPAUT*. The command line is similar to the example given above, except for the */prog=* and */link=* parameters. The program name is *Task* and the linkage is the name of the task group, in this case *Random*.

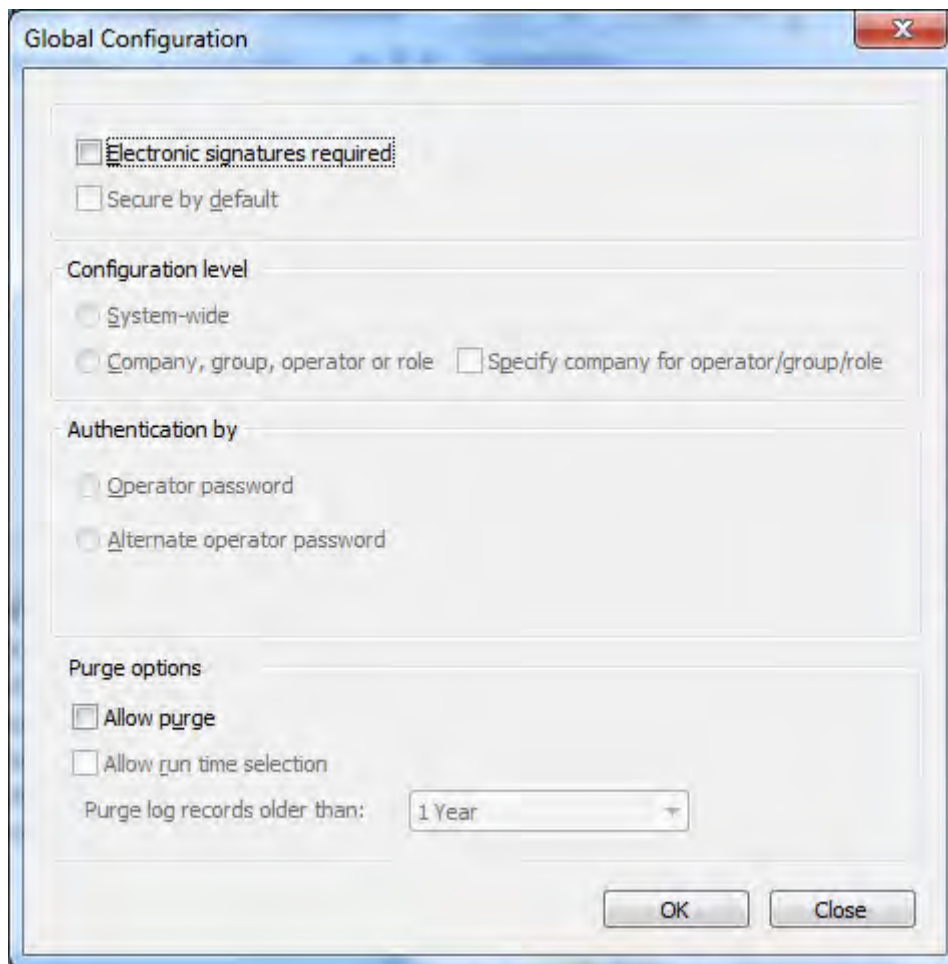
```
C:\SYSPRO61\BASE\IMPAUT.EXE /h /oper=ADMIN /comp=0 /Prog=Task /link=Random
```

When configuring the task group, checking the option *Automatically run tasks sequentially* will cause the tasks in the group to run after each other without any operator intervention.

## Electronic Signatures

*Electronic Signatures* can be used to allow/prevent operators, groups or roles from performing specific tasks and log when the task is performed.

When a task is performed that is under control of electronic signatures, you can be confident that this task was performed by the specified operator, as at the point when the task is performed the operator is prompted for their password. So, even if an operator left their workstation unattended, the person attempting to perform the task will need to provide the original operator's password before the task is completed.



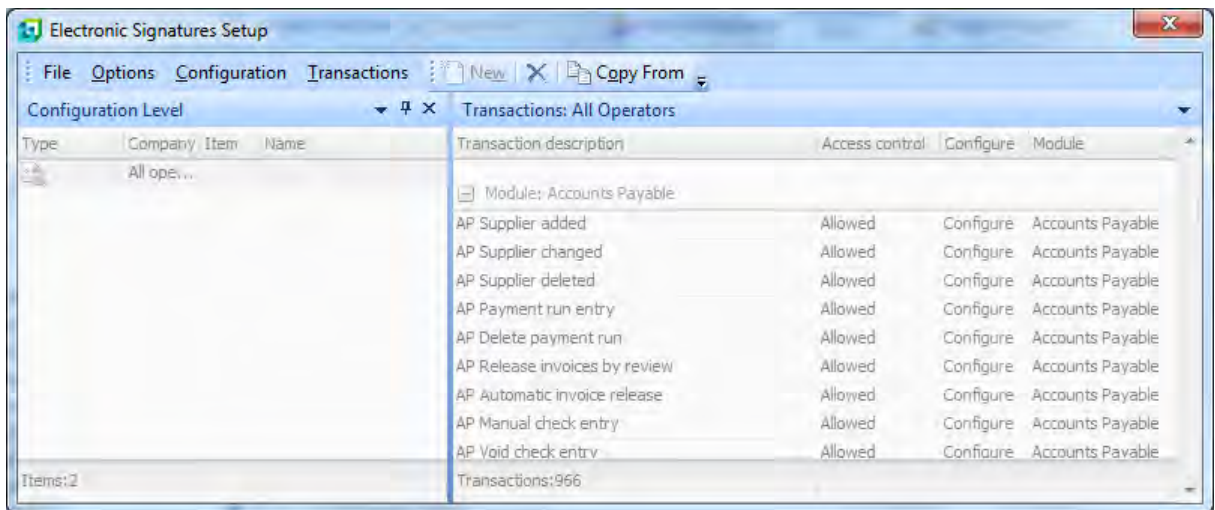
**Figure 9-23:** The *Global Configuration* program



In addition, the electronic signature can be configured to send an email, run a VBScript, run any Net Express program, run any application, write to the message inbox, or run an SRS report, in much the same way as *Events/Triggers*. Conditional logic can also be set so that an electronic signature trigger is only fired when additional conditions are met.

Electronic signatures are disabled by default and are enabled using the *Electronic Signatures* option on the ribbon bar (*Ribbon Bar* | *Setup* tab | *Security* section | *Electronic Signatures*) or from the SYSPRO Main Menu (*Utilities* | *Electronic Signatures* | *Setup*). It can also be enabled via the *Role Management* program that is covered in more detail at the end of this chapter. When the program is run for the first time, the *Global Configuration* screen is displayed (see **Figure 9-23**). The first option is whether the electronic signatures system is required. If this is selected, the *Secure by default* option is automatically checked and the *System-wide* radio button is automatically selected, together with the *Operator password* radio button. The *Allow purge* option remains unchecked.

If the options are left to their default settings and the *OK* button is selected, the *Electronic Signatures Setup* screen will appear as in **Figure 9-24**.



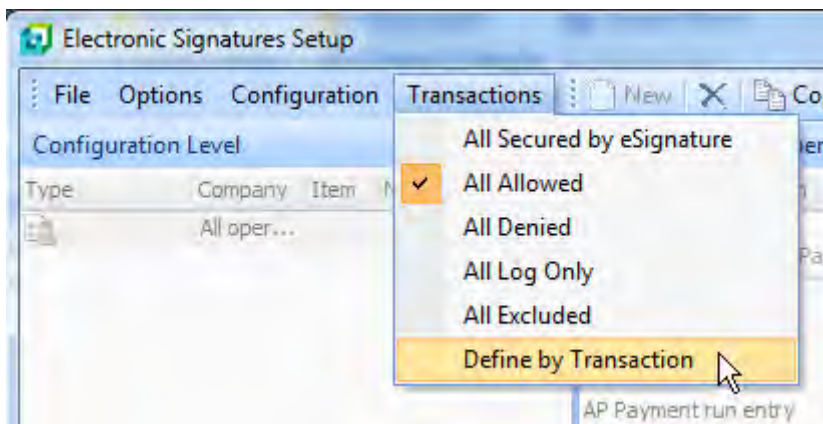
**Figure 9-24:** The *Electronic Signatures Setup* screen after using the default settings

The electronic signatures configuration will be set to *System-wide*. As nothing has been configured at this point the *Access control* is set to *Allowed*, otherwise the next time that you logged in you would not be able to perform any tasks. The system will continue to work as it did before you selected to use electronic signatures.

To make use of the features of electronic signatures for an existing operator you would probably start by selecting *All Allowed* from the *Transactions* dropdown list on the toolbar. This would be followed by selecting *Define by Transaction*. This would set the default to Allowed and enable you to use the *Configure* option against those transactions that should be under the control of electronic signatures.

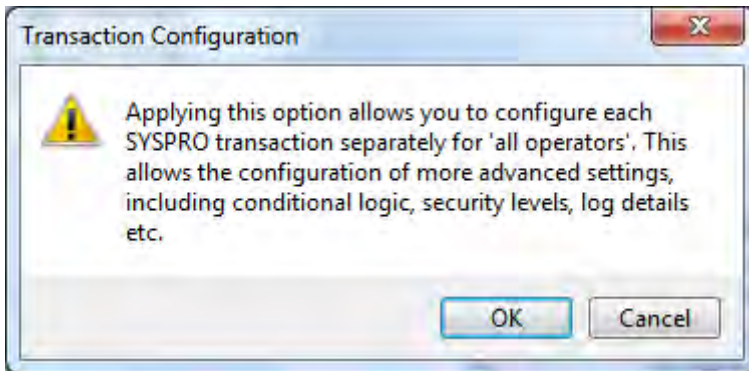
For a new operator, you would probably start by selecting *All Denied* from the *Transactions* dropdown list on the toolbar. This would be followed by selecting *Define by Transaction*. This would set the default to Denied and enable you to use the *Configure* option against those transactions that should be under the control of electronic signatures.

For those items where you used the *Configure* option to set to be under the control of electronic signatures, the *Access control* column of the listview will be populated with the text *eSignature* (see **Figure 9-25**). After this, whenever an operator attempts to perform any of the transactions in this (greyed-out) listview, they will be required to provide their operator password. The transaction that was performed (or attempted) will be logged in the audit log. If the operator does not have a password, the transaction will not be completed and a message to this affect will be presented to the operator.



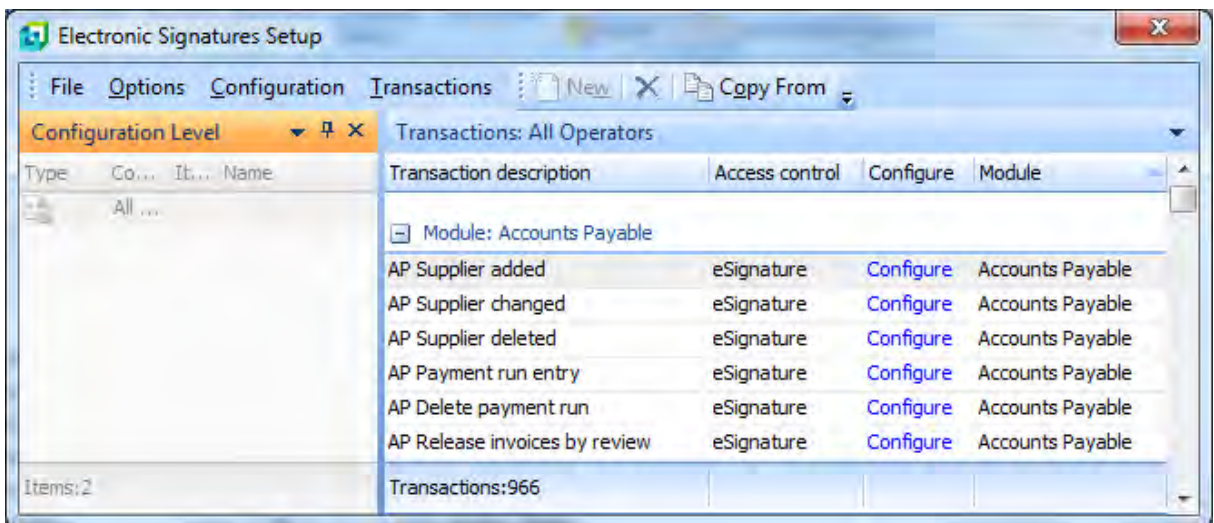
**Figure 9-25:** Setting all the transactions to be under the control of electronic signatures

You can have greater control over who can perform which task by selecting the *Define by Transaction* option instead of *All Secured by eSignature*. You will receive a notification that this allows you to configure each transaction separately (see **Figure 9-26**).



**Figure 9-26:** The information message received when you select *Define by Transaction*

After selecting the OK button, the *Transactions* listview will no longer be greyed-out. Within this listview there will be a hyperlink in the *Configure* column against each transaction (see **Figure 9-27**).



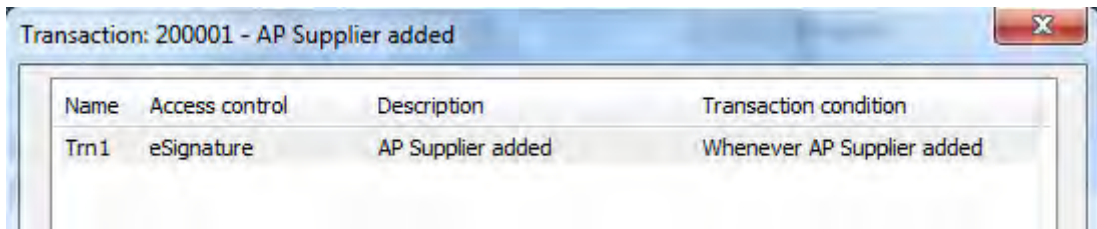
**Figure 9-27:** The Configure hyperlink against each entry in the Transactions listview

If this hyperlink is selected for a transaction, a screen is displayed where you can configure how this transaction should be handled. The top part of this screen appears in **Figure 9-28**. Each transaction type has a transaction number that appears in the titlebar, together with the matching description.

In **Figure 9-28**, the transaction is *AP Supplier added*, and its transaction number is *200001* (which can be seen in the titlebar). Just below the titlebar is a listview containing the conditions under which the

electronic signature will fire. By default, the first condition is called *Trn1* and the *Transaction condition* will match the selected transaction. In this case it is *Whenever AP Supplier added*.

It is possible to add more conditions and set conditional logic against them. When this is done, additional entries will appear in this listview. The adding of new entries with conditional logic is covered later.



**Figure 9-28:** The transaction name/number in the titlebar, and the condition in the listview

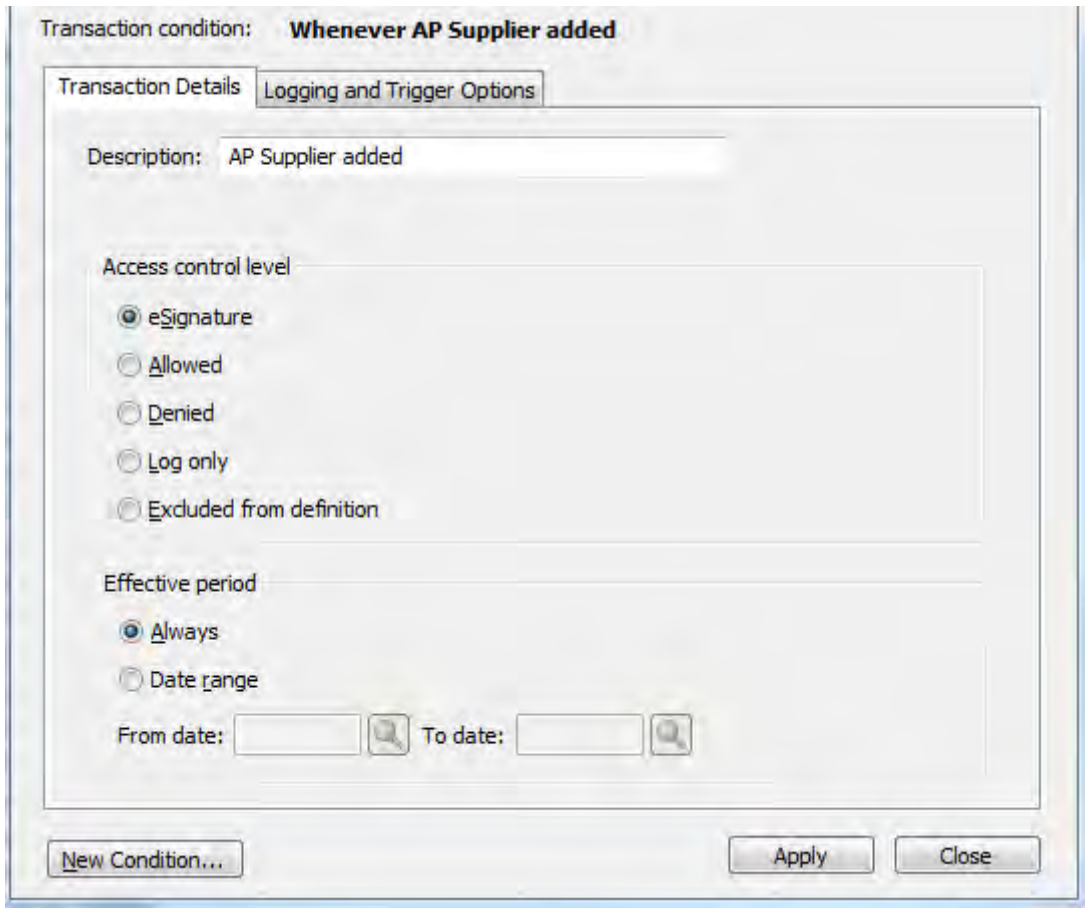
Further down this screen are the details for the currently selected entry in this listview. First is the description taken from the *Transaction condition* column. Below this are two tabs: *Transaction Details* and *Logging and Trigger Options* (see **Figure 9-29**). On the *Transaction Details* tab is the *Description* from the listview which, if changed, will also be changed in the listview. Below this is the *Access control level* section that consists of radio buttons. The first option is *eSignature*, which means that the operator must enter their password when performing this transaction, or their alternate password, depending on the setting in the *Global Configuration* (see the *Authentication level* section of **Figure 9-23**). If this operator does not have the relevant type of password against their operator code, the transaction is not performed and a message to this affect is displayed. In addition, when *eSignature* is selected, the options on the *Logging and Trigger Options* tab become available and the transactions are written to the audit log.

The *Allowed* option specifies that this transaction can be performed without supplying a password, and no entry is written to the log file.

The *Denied* option specifies that the operator is not allowed to perform the transaction.

The *Log only* option specifies that the operator is allowed to perform the transaction without specifying a password but unlike the *Allowed* option, the audit log is updated.

The *Excluded from definition* option is used if you want this transaction to be ignored for the currently selected configuration level. As it is possible to configure electronic signatures for SYSPRO companies, operators, and groups, excluding the electronic signature from this level means that it will cascade up to the next level.



**Figure 9-29:** Setting the *Access control level* and *Effective period*

If multiple transactions have been configured for a single operator/group/company it is possible that when the transaction occurs, more than one of the conditions is true. For example, a stock transaction may occur that would cause the *Whenever stock on hand changed*, the *Stock on hand < Safety level*, and the *Stock on hand < 0* electronic signatures transactions to fire. In this case, the most restrictive of these conditions will be used. So, if any of these conditions are set to *Denied*, this will be applied, followed by *eSignature*, *Log only*, *Allowed*, and *Excluded from definition*. If electronic signatures are configured by role, all these rules will be superseded.

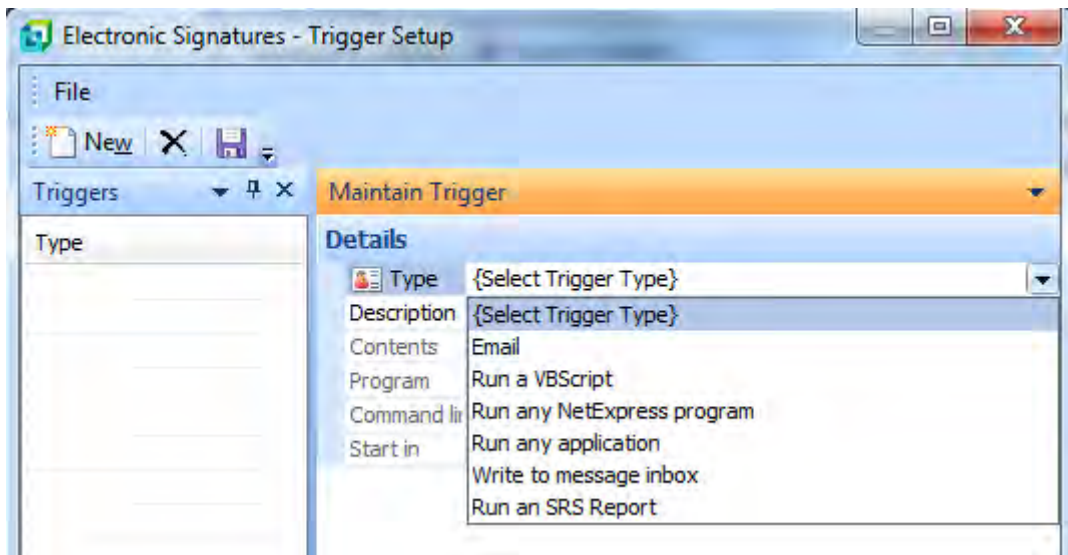
Where an operator belongs to multiple operator groups, the following logic is used to determine which group's configuration to use. An *eSignature* takes precedence, followed by *Log only*, *Allowed*, *Denied*, and *Excluded from definition*. So, if the operator belongs to any group where *eSignature* is configured

for the current transaction, this overrides *Denied* configured for another group for the same transaction.

The *Effective period* section allows you to specify the time period for which this transaction applies. If the *Always* radio button is selected, it will always apply. If the *Date range* radio button is selected, the *From date* and *To date* fields are enabled and these can be used to specify the date range. They will both default to today's date.

On the *Logging and Trigger Options* tab are two checkboxes, which will only be enabled if the *eSignature* or *Log only* radio buttons are selected on the *Transaction Details* tab. The first checkbox is *Detail log required*. When this is checked, the *Configure Details* button is enabled. If this button is selected the *Available Variables* screen is displayed which contains many variables in a listview. Some variables in this listview are specific to the transaction type and some are generic system variables. Each variable has a checkbox against it so you can specify which must be written to the detailed audit log. Once these variables have been chosen, use the *OK* button to save and exit back to the *Logging and Trigger Options* tab.

The second checkbox on the *Logging and Trigger Options* tab is *Transaction successful*. If this option is checked, the *Setup Trigger* button is enabled. If this button is selected, the *Trigger Setup* screen is displayed (see **Figure 9-30**). The left hand pane is a listview where the *Type* of any existing triggers will be displayed. The right hand pane is where you add the triggers.

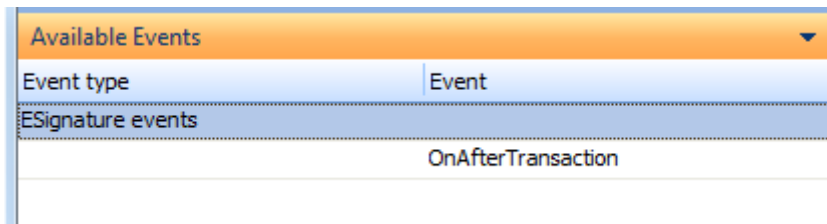


**Figure 9-30:** The *Trigger Setup* screen

To add a new trigger, click on the *New* button and select the trigger type using the dropdown list against the *Type* prompt. The available types are Email, Run a VBScript, Run any Net Express program, Run any application, Write to message inbox, and Run an SRS Report. Depending on which type is chosen, the options below the *Type* prompt are enabled or disabled.

Selecting *Email* causes a default *Description* of *Email* to be inserted (which can be changed) and the *Contents* to contain a hyperlink of *Edit*. When you click on the *Edit* hyperlink you are prompted to enter one or more email addresses against the *To* prompt and optionally against the *Cc* prompt. The *Subject* will default to the text that appears against the *Description* field on the previous screen (which can also be changed). You can enter text against the message body. Both the message body and the *Subject* can contain the parameter *%Key*, which will be replaced by the key field of the transaction being performed at the time the trigger is fired. In the example that has been used above, of *AP Supplier added*, the *%Key* variable will contain the supplier code. Use the *Save* button to save the email trigger and return to the *Trigger Setup* program.

Selecting *Run a VBScript* causes a default *Description* of *Run a VBScript* to be inserted (which can be changed) and the *Contents* to contain an *Edit* hyperlink. Clicking on the *Edit* hyperlink displays SYSPRO's *VBScript Editor*. Within the *Available Events* section there is an *ESignature* event called *OnAfterTransaction* (see **Figure 9-31**). Beyond this point requires development skills, which falls beyond the scope of this book.



**Figure 9-31:** The *OnAfterTransaction* electronic signature event

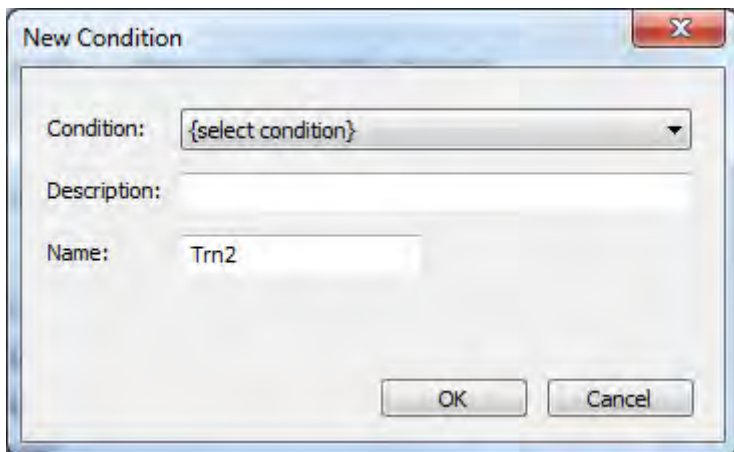
Selecting *Run any NetExpress program* causes a default *Description* of *Run any NetExpress program* to be inserted (which can be changed) and the *Program* prompt to be enabled. You must specify the program name and its location in relation to the SYSPRO server (and you can use the browse button to locate the program name). You cannot provide any parameters to this program. However, if the Net Express program has been written using standard SYSPRO techniques, the field LINK-EXTRA will contain the key of the code that triggered it (the same value that would appear in *%Key* if it were an email trigger). In the example of the *AP Supplier added* trigger, this would be the supplier code.

Selecting *Run any application* causes a default *Description* of *Run any application* to be inserted (which can be changed) and both the *Command line* and *Start in* prompts to be enabled. You can use

the browse button to locate the application, or enter its name. The parameter *%Key* can be added after the application name if you want to pass through the key to the application at run time. The entry against the *Start in* prompt specifies the folder in which you will reside when the application is run. If the application creates files, but does not include a path for the created file, the file will be created in the *Start in* folder. In addition, if the application resides in the *Start in* folder it means that you can remove this path from the *Command line*. This makes it easier to see the whole command with its parameters, but does not affect the functionality.

Selecting *Write to message inbox* causes a default *Description of Write to message inbox* to be inserted (which can be changed), and the *Contents* to contain an *Edit* hyperlink. The *Write to message inbox* trigger is used to write messages to an operator's message inbox within SYSPRO. When you click on the *Edit* hyperlink the *Message Inbox Details* screen is displayed. The first option is *Subject text*, which allows up to 40 characters to be entered as the message. This can include keywords, which are expanded when the event fires. The second option is the operator code to be notified. A valid operator code must be supplied. The *Program to run* is optional and used to call a SYSPRO program if the operator receiving the message double-clicks on it. The next option is *Post messages with today's date*. If checked, this option will add one entry to the message inbox for each time the event is fired. If unchecked, only one entry will appear in the message inbox for this event for this day, no matter how many times it is fired. It will always be the last one fired that is displayed. The last option is *Prevent duplicate message being displayed* which will only allow one message to be displayed. Duplicate messages are those where the *Subject text* and *Program to run* are the same.

Returning back to the *Transaction* screen, the *New Condition* button is used to add new conditions. When selected, the *New Condition* screen is displayed (see **Figure 9-32**).



**Figure 9-32:** Adding a new condition to a transaction



Against the *Condition* prompt is a dropdown list from which you can select the default transaction condition name (using the example above, this would be *Whenever AP Supplier added*) or *User defined*. If the default transaction condition name is selected the *Description* defaults to the same (but can be changed). The *Name* defaults to the next *Trn* number in sequence, but can be also changed.

If the *User defined* condition is selected the *Description* will default to *User defined* and the *Name* will default to the next *Trn* number. Both can be changed. In addition, the *Define Condition* button will appear. Clicking on this button displays the screen that appears in **Figure 9-33**, where you define the condition.

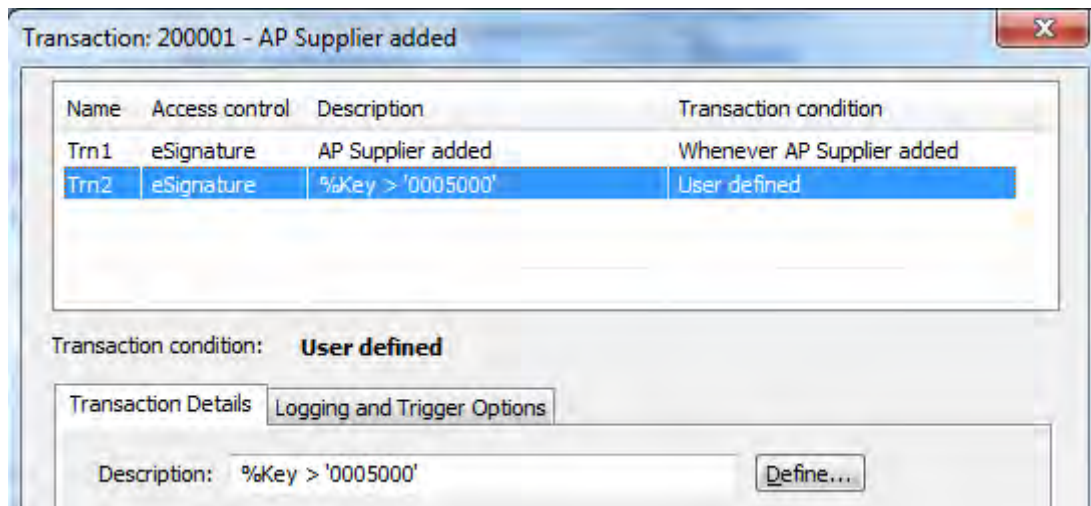
	Field, Variable	Condition	Field, Variable, Constant
<input type="checkbox"/>	If ( %Key	Greater than	'0005000'
<input checked="" type="checkbox"/>	And ( %Nationality	Equals	"USA"
<input checked="" type="checkbox"/>	Or %Nationality	Equals	"CAN"
<input type="checkbox"/>			
<input type="checkbox"/>			
<input type="checkbox"/>			
<input type="checkbox"/>			

Buttons: Insert Row, Delete Row..., Clear Condition..., OK, Cancel

**Figure 9-33:** Adding a *User defined* condition

The condition defined in **Figure 9-33** is that the transaction should fire if the *Supplier code* is above 5000 and the *Nationality code* is either *USA* or *CAN*. Once the condition has been added, click on the *OK* button to exit back to the *New Condition* screen and click on the *OK* button to return to the transaction screen.

The condition that you have just added will appear in the listview at the top of the transaction screen (see **Figure 9-34**). The information displayed in the transaction screen will depend on which condition is currently highlighted in this listview. Any changes that you make will be against the selected condition (the type of transaction, the date range within which it must occur, the trigger to fire, and the variables to be logged).

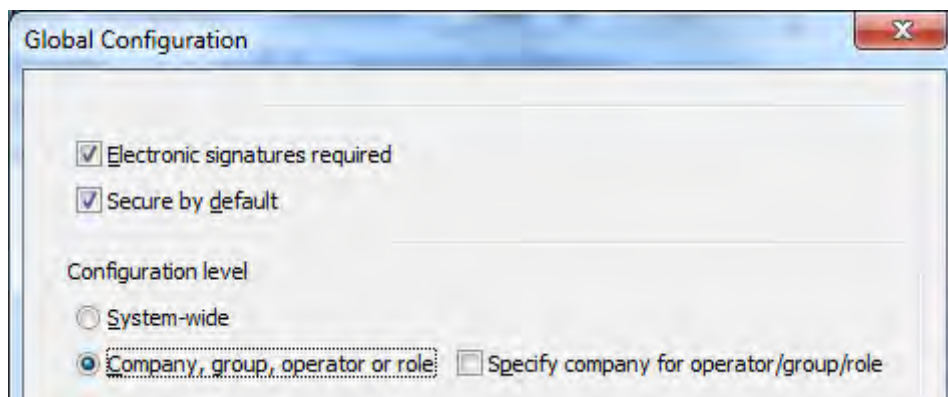


**Figure 9-34:** Multiple conditions in the transaction listview

Clicking on the *Apply* button will save the settings and the *Close* button will take you back to the *Electronic Signatures Setup* screen. When you exit this screen an information message is displayed stating that the changes will only take effect the next time that an operator logs in.

### Company, Group, Operator or Role

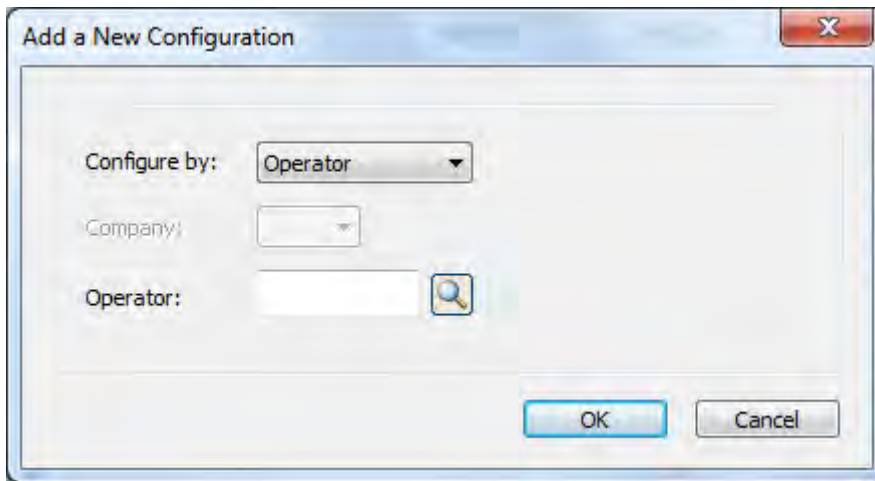
On the *Global Configuration* screen (from the toolbar of the *Electronic Signature Setup* program) you can change the *Configuration level* from *System-wide* to *Company, group, operator or role* (see **Figure 9-35**). This enables you to control the electronic signatures at a granular level.



**Figure 9-35:** Changing the *Global Configuration* to *Company, group operator or role*

When you make this change, if you already have a *System-wide* configuration you will receive a warning message that this will be lost if you continue.

If you continue, the *Specify company for operator/group/role* checkbox will become enabled. This option allows you to specify the company when defining transactions for a group, operator or role. If you click on the *Global Configuration* screen's *OK* button (after changing the *Configuration level* to *Company, group, operator or role*) a message is displayed prompting you to configure these. If you select the *Yes* button, the *Add a New Configuration* screen is displayed (see **Figure 9-36**). This screen can also be accessed using *Configuration | New* from the toolbar of the *Electronic Signature Setup* program.



**Figure 9-36:** Adding a new configuration for an operator

The *Add a New Configuration* screen enables you to add operators, companies, and groups to the *Electronic Signature Setup* program. Using the dropdown list against the *Configure by* prompt, you select the level. If the level is set to *Company*, the *Company* dropdown list is enabled and the current company ID will be the default entry. If the level is set to *Operator*, the *Operator* dropdown list is enabled (if the *Specify company for operator/group/role* checkbox was checked against the global configuration, the *Company* dropdown list is also be enabled). If the level is set to *Group*, the *Group* dropdown list is enabled (if the *Specify company for operator/group/role* checkbox was checked against the global configuration, the *Company* dropdown list is also enabled).

Once you have added the operators, groups, and companies you can configure them. By default they will have their access level set to *Allowed* for all transactions (see **Figure 9-37**). Highlight one and select *Transaction* from the toolbar (in the same way as was done for *System-wide* and the beginning

of the Electronic Signature section). Configure the operator, company or group in the same way as covered above.

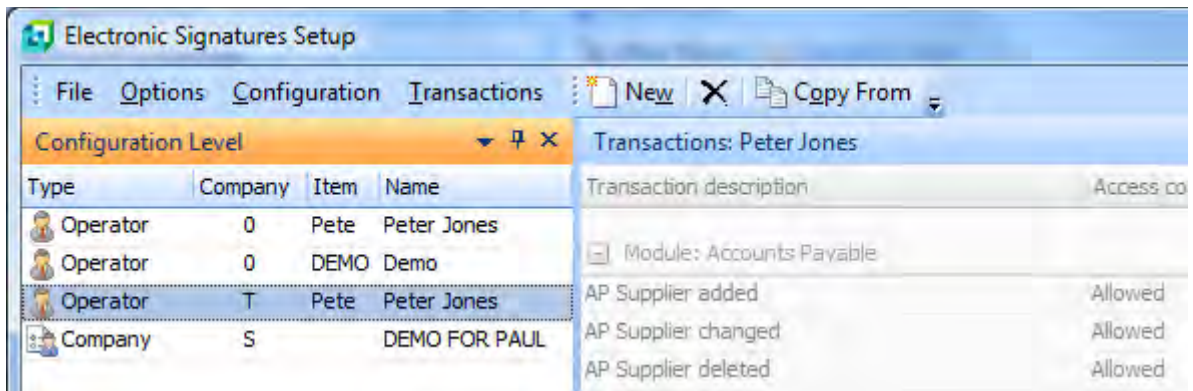


Figure 9-37: List of operators and companies

### Electronic Signatures Audit Log

Any transaction that causes an electronic signature to fire will be written to the electronic signature audit log, even if it fails (such as when an operator supplies the incorrect password). The audit log can be viewed using the *Audit Log* program (*Main Menu | Utilities | Electronic Signatures | Audit Log*).

The audit log has standard filters such as *All Transactions*, *Today*, *Past Month*, etc. You can create a custom filter where you can specify the *Transaction id*, *Operator*, a specific date/date range. You can also specify the status of the transaction such as only those where the operator was denied access. As the audit log is in a listview, all of the normal functions of the listview such as sorting by columns and grouping are available to you.

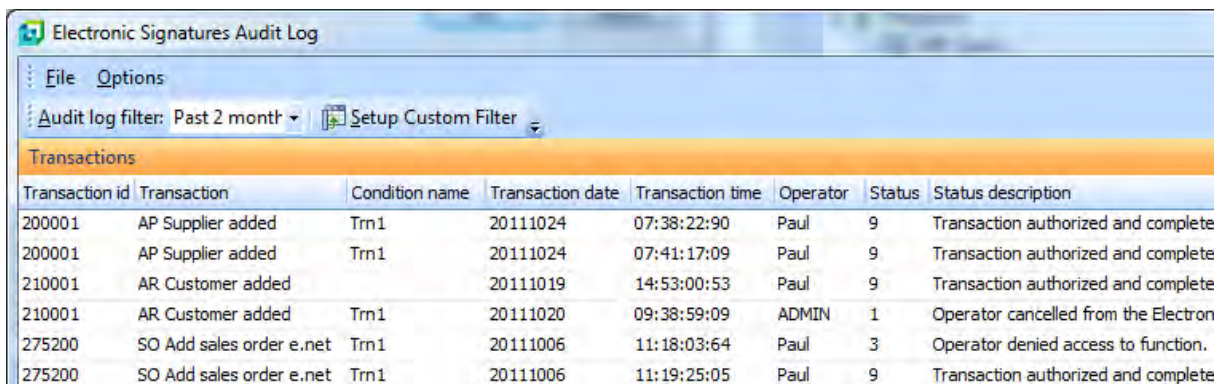
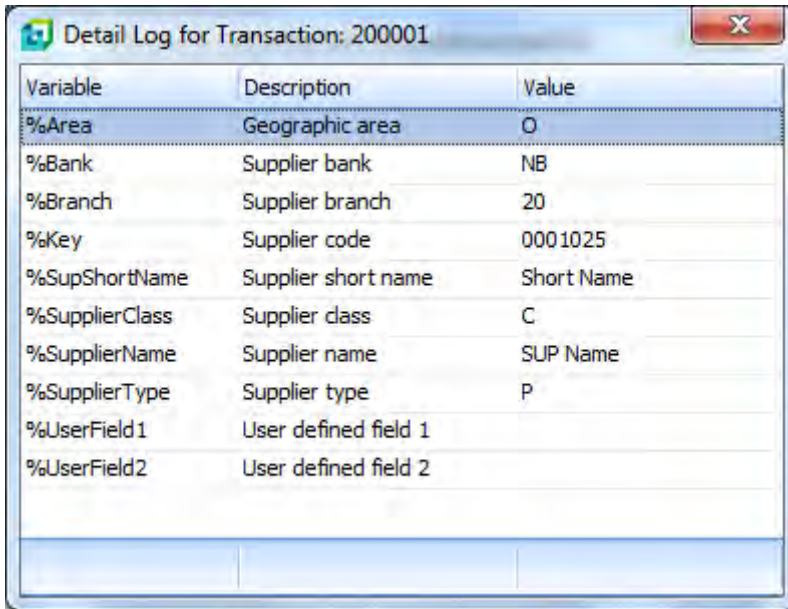


Figure 9-38: The electronic signatures *Audit Log*

**Figure 9-38** shows an extract from an audit log. If the transaction that causes the entry to be written to the log had its *Detail log required* checkbox checked, then whichever variables had been configured against it will be logged against this transaction. Right-clicking on one of these transactions in the audit log and selecting *View Detail Log* will display these variable names, descriptions, and their values at the time the transaction occurred. **Figure 9-39** shows the variables against the detail log for the first transaction in **Figure 9-38**.

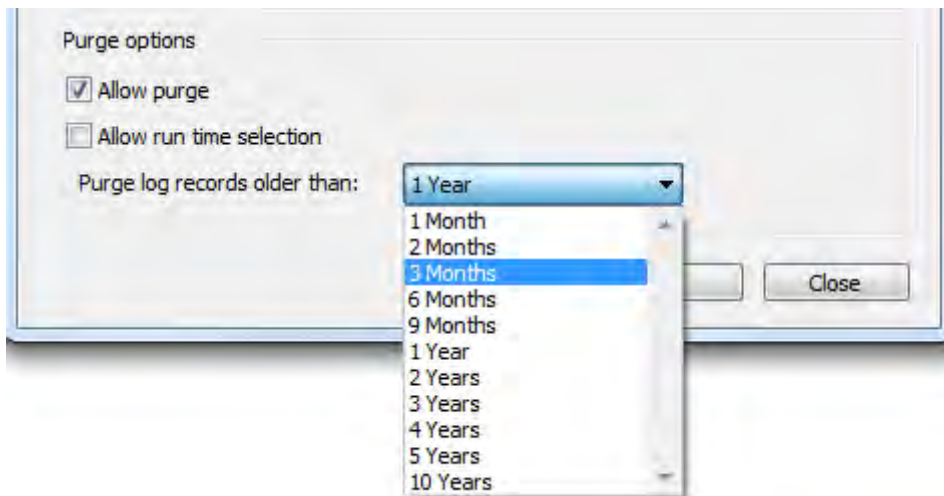


Variable	Description	Value
%Area	Geographic area	O
%Bank	Supplier bank	NB
%Branch	Supplier branch	20
%Key	Supplier code	0001025
%SupShortName	Supplier short name	Short Name
%SupplierClass	Supplier class	C
%SupplierName	Supplier name	SUP Name
%SupplierType	Supplier type	P
%UserField1	User defined field 1	
%UserField2	User defined field 2	

**Figure 9-39:** The *Detail Log* for a specific transaction

Against the electronic signature *Global Configuration* program is an option to specify whether the electronic signatures can be purged. If this is not checked, and the *Audit Log Purge* is run, it will prevent all entries from being purged. You can also stipulate how old a record must be before it can be purged and if this can be changed at run time (see Figure 9-40).

At run time you can specify to purge all audit log transactions that meet the criteria, or only those from the detail log.



**Figure 9-40:** Configuring the *Audit Log Purge* settings

## Customization Management

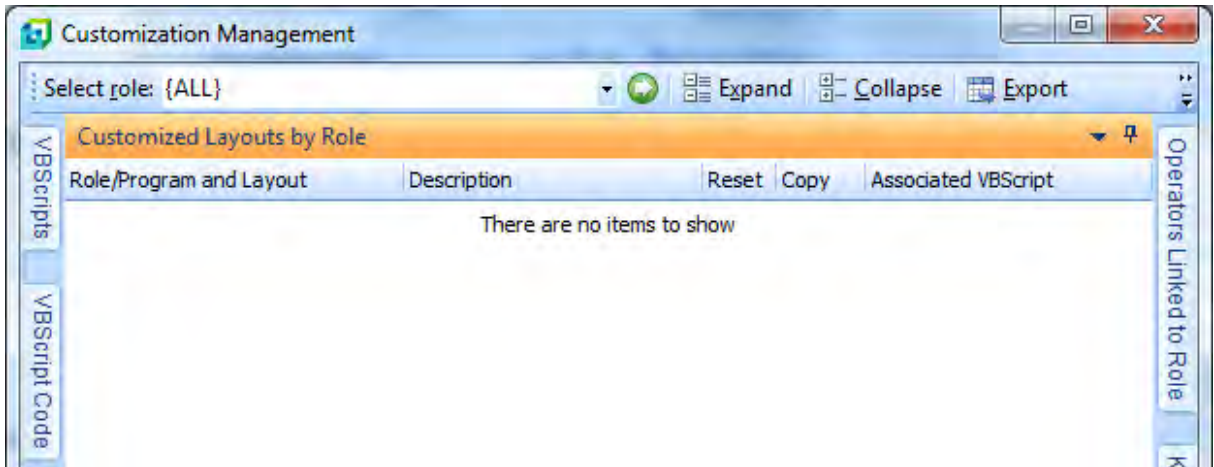
The *Customization Management* program is used to view and manage the various customization layouts that have been applied within SYSPRO. Some of these layouts are specific to operator roles, whereas others are company-wide. Elements of the user interface that you can customize range from docking panes and listviews to display forms and entry forms. The nature of the customizations range from moving and removing columns, fields and panes, to configuring keywords for exclusion in selected listviews (e.g. whenever the title of a listview column contains the word cost, then the column must be hidden for the selected role).

The *Customization Management* program also displays all VBScripts that have been written for the site and indicates what custom form fields, scripted fields, or master table fields have been added to all forms. The displayed customizations can be deleted, or copied between roles and workstations (the latter using the export/import functions).

You can only design customization for roles if the option *Allow role layout design* is selected against your operator code (*Ribbon Bar* | *Setup* tab | *Security* section | *Operators* | highlight operator code | *Change* | *Defaults* tab | *Access* section). When defining customization by role in a client/server environment, this customization/design must be done on the client machine. If the customization/design of roles is done directly on the application server, it will not self-heal to the client.

The *Customization Management* program is run from the *Customization Tools* dropdown list on the *Home* tab of the *Ribbon Bar*, or from the *Utilities* section of the SYSPRO *Main Menu* (*Main Menu* | *Utilities* | *Customization Management*). When it is run for the first time it will consist of a toolbar and

the *Customized Layouts by Role* listview. Down the left side will be tabs for *VBScripts* and *VBScript Code*, and down the right side will be tabs for *Operators Linked to Role*, *Keyword Exclusion for Listviews*, *Customized Hyperlinks*, *Customized Exceptions*, and *User Interface Override List* (see **Figure 9-41**).



**Figure 9-41:** The initial view of the *Customization Management* program

You can view all the customized layouts, or just those for a specific role. If you want to see all the layouts, leave the default of *{ALL}* against the *Select role* prompt and click on the *Go* button (white arrow on green background). The information for all roles containing customization will appear in the listview. Alternatively, use the dropdown list to select a role. As you click on the role name it appears in the listview.

**Figure 9-42** shows the *Customized Layouts by Role* listview after the *{ALL}* option has been selected. Only three of this organization's roles have customization against them, so only these three appear in the listview. When a role is added to SYSPRO, it is assigned a three digit number and this number can be seen alongside the role description. Against each of these roles is a *reset* hyperlink (which will remove all the customizations associated with this role) and a *copy* hyperlink (which will call up the *Copy layout* program).

Calling the *Copy layout* program (from the *copy* hyperlink alongside the role name) enables you to copy the complete customization layout from this role to one or more others. The information at the top of the screen shows what you are copying and from which role. Below this, is a list of all the other roles that exist on the system. You can check one or more of these roles (or use the *Select All/Unselect All* buttons) then use the *Copy* button to add customizations to these roles. If the *Refresh after copy* option is checked, the *Customized Layouts by Role* listview is refreshed after the copy has

taken place. All of the displayed roles will be expanded to show all their customizations. The program's description is hyperlinked and clicking on this will call up the program as the current user/role.

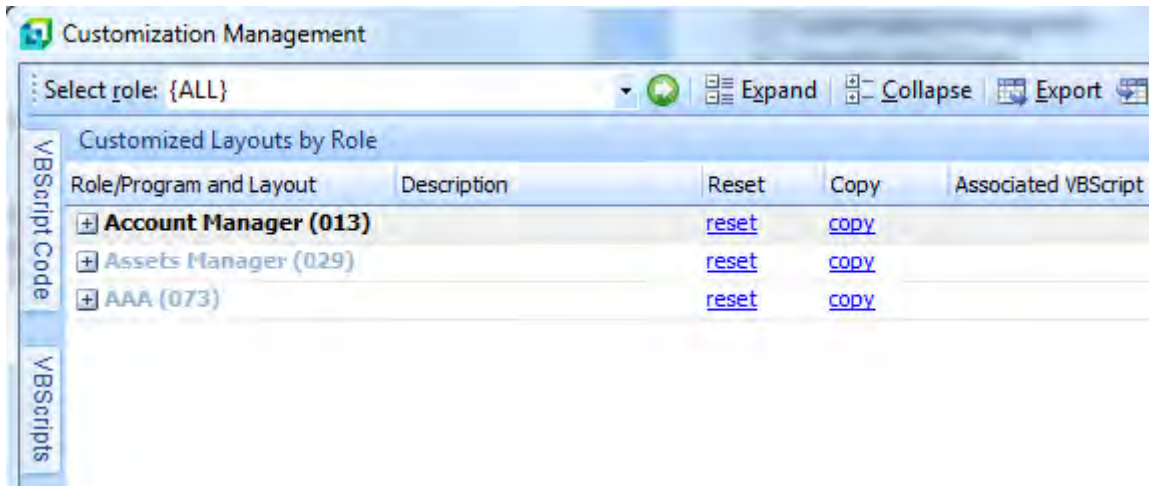


Figure 9-42: The customized layouts for all roles

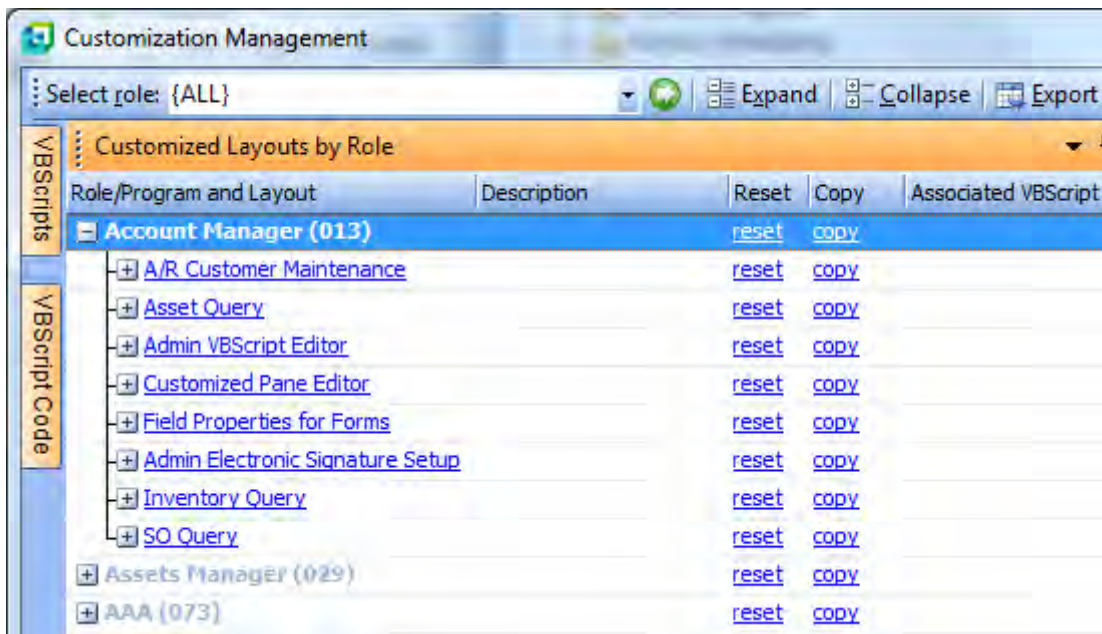
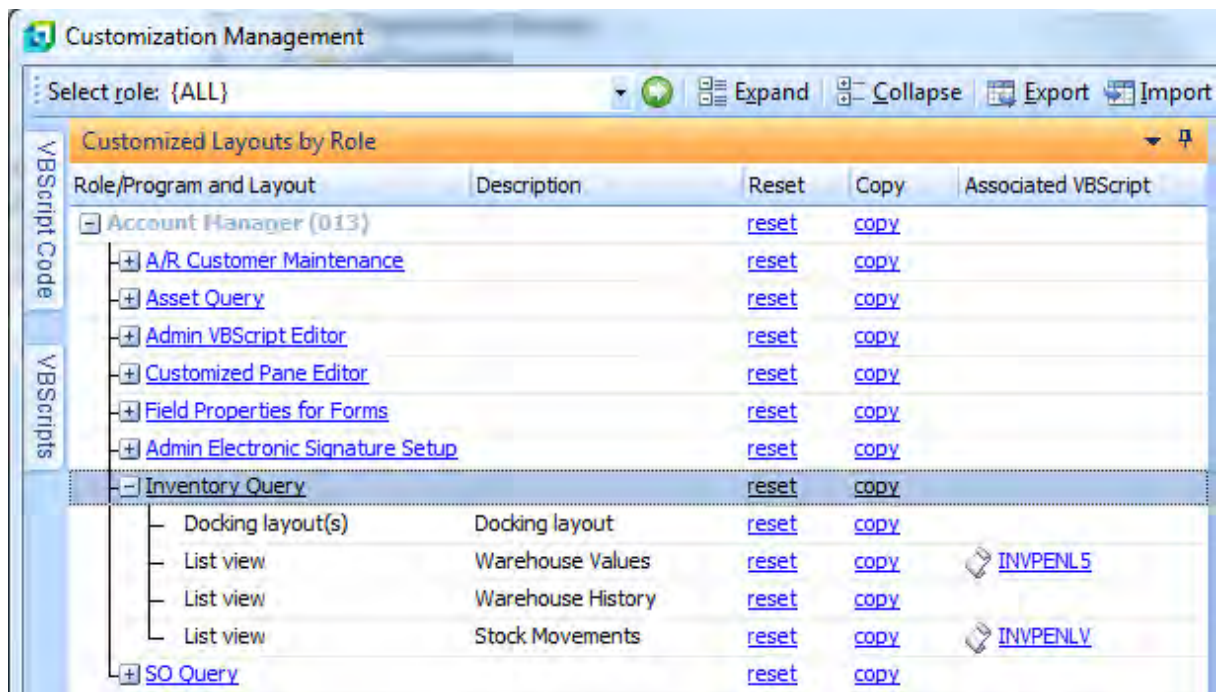


Figure 9-43: Expanding the first level of a role



When you click on the plus sign alongside a role name in the *Customized Layouts by Role* listview it will expand its first level, which is the descriptions of all programs that have been customized. **Figure 9-43** shows the *Customized Layouts by Role* listview where the *Account Manager* role has been expanded to show its first level. The first level consists of the program descriptions of all programs that have been customized for this role. Against each of these program descriptions are the same *reset* and *copy* hyperlinks and they work in the same way as those against the role.

Expanding a program description against a role exposes the lowest level of customization. **Figure 9-44** shows four sub-items below *Inventory Query*. The first is *Docking layout(s)* with a description of *Docking layout*. This will appear if one or more forms or listviews have been moved, or minimized/maximized. The next three are all *List view* and the description is the name of the listview that was changed. This typically occurs when columns are moved/added/removed from a listview.



**Figure 9-44:** Expanding a program description against a role

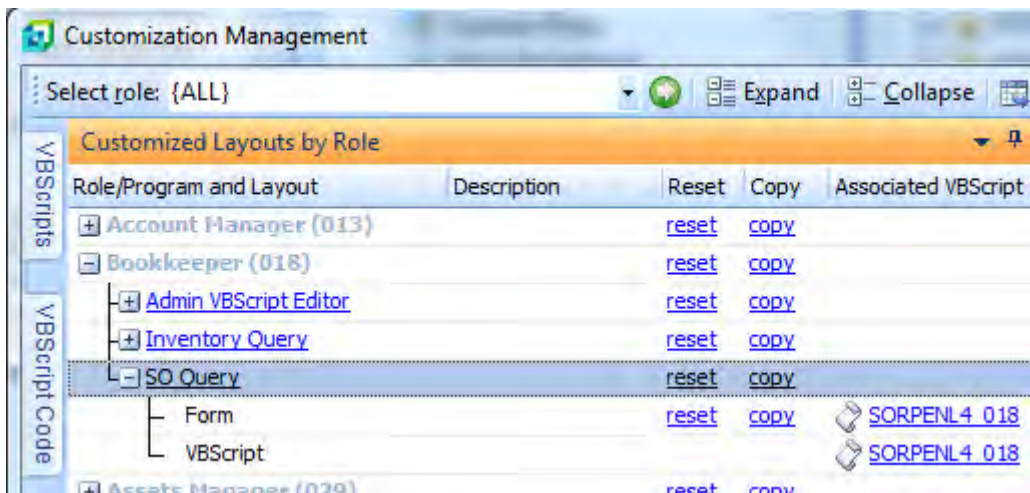
Other items that can appear in this list are: *Form* (with no description) which will appear if you have changed the name of a field using the *Field Properties* option against a form; setting a flag within the *Field Properties* option against a form; adding a *Form Action* against a form; and inserting a standard

field to a form. *Toolbar* will appear (with a description of *Toolbar*) if you call up the option to customize a toolbar.

If you add an *Associated Pane* to a program for this role, there will be entries for *Docking Layout(s)*, *Form* and *Customized pane* within the *Customized Layouts by Role* listview. Against the *Customized Pane* entry will be a description of the associated pane's title.

If you add a *Customized Pane* there will be entries for *Docking Layout(s)* and *Customized Pane*, with a description of the customized pane's title.

Against each of these options is the same *reset* and *copy* hyperlinks, so that you can copy/remove these individual entries. Against some of the *List view/Form/Toolbar* entries you will see a hyperlinked value in the *Associated VBScript* column, which shows that there is a VBScript associated with this entry. If the VBScript name is eight characters long, the VBScript is associated with this form/listview/toolbar. If the name includes the role number at the end, it is associated with this form/listview/toolbar for this role only. The VBScripts in **Figure 9-44** are associated with the listviews, as their names are eight characters long, whereas the VBScript name in **Figure 9-45** is associated with this program for this role only.

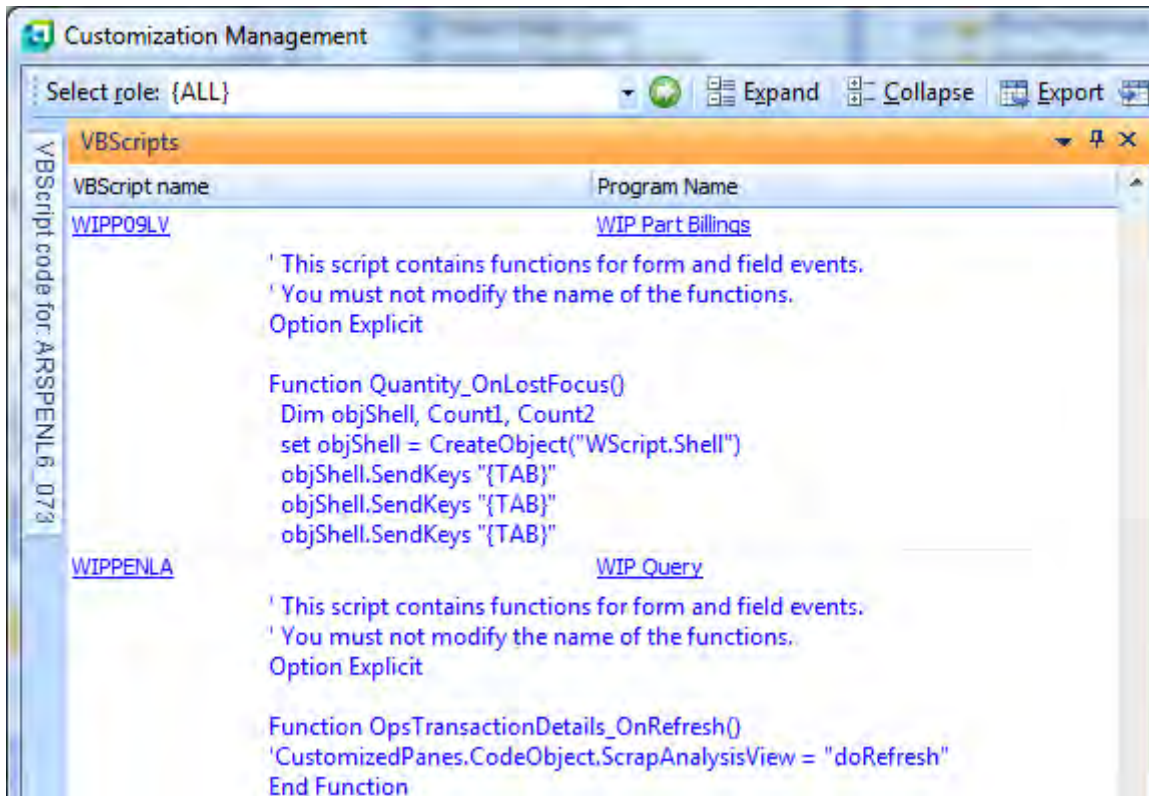


**Figure 9-45:** A VBScript associated with the role

Clicking on this hyperlinked VBScript name will expand the *VBScript Code* tab and populate it with the contents of the VBScript. The tab name/title will also change to “VBScript code for:” followed by the name of the VBScript file. You can only view the contents of the VBScript here; you can't modify it.

Expanding the VBScripts tab displays a listview of two columns containing the hyperlinked VBScript name and the hyperlinked program description. Below each row are the first 10 lines of the script (see

**Figure 9-46).** Clicking on the hyperlinked VBScript name within this listview expands the VBScript Code tab and populates it with the full script, in the same way as mentioned above. Clicking on the hyperlinked program description will run the program as the current user.



**Figure 9-46:** The VBScripts tab shows the VBScript name, program description, and first 10 lines of script

Expanding the *Operator Linked to Role* tab displays a listview containing columns for the operator code, operator name, primary role, and roles 2 to 5 (see **Figure 9-47**).

The *Customized Exceptions* and *Customized Hyperlinks* listviews display the form hyperlinks and exceptions that were covered in a prior chapter. These are not role-specific.

Operator	Name	Primary role	Role 2	Role 3	Role 4	Role 5
ABC	ABC	Account Manager				
ADMIN	SYSPRO Administrator					
BNUser	Brand New user	Bookkeeper				
DEMO	Demo	Chief Executive Officer				
FIRST	Time User					
NUser	New user for test					
NewAD	New admin					
NewOp	new operator	Account Manager				
Paul	Paul					
__DFM	Document Flow Manager					
NRUser	New Role User	Assets Manager	Assistant Controller	Assets Buyer		

**Figure 9-47:** The *Operators Linked to Role* listview

The *Keyword Exclusion for Listviews* tab enables you to define keywords against roles (see **Figure 9-48**). Columns containing these words will not appear in listviews when viewed by members of these roles, nor fields containing these words in quickviews. Use the *remove* hyperlink against a role/keyword combination to remove a specific entry and the *remove all* hyperlink to remove all entries for a role.

Role	Keyword	Remove
<input checked="" type="checkbox"/> Assets Buyer		<a href="#">remove all</a>
└	profit	<a href="#">remove</a>
<input checked="" type="checkbox"/> Loader		<a href="#">remove all</a>
└	cost	<a href="#">remove</a>
└	profit	<a href="#">remove</a>
<input checked="" type="checkbox"/> Dispatcher		<a href="#">remove all</a>
<input checked="" type="checkbox"/> Driver		<a href="#">remove all</a>
<input checked="" type="checkbox"/> Car Park Attendant		<a href="#">remove all</a>

**Figure 9-48:** Defining the *Keyword Exclusion for Listviews* list

When an operator becomes a member of a role they are prevented from performing certain tasks (such as adding VBScript code) in all programs unless they are in *Design Role Layout* mode. The *User Interface Override List* is used to configure which programs are affected by these role restrictions for this role.

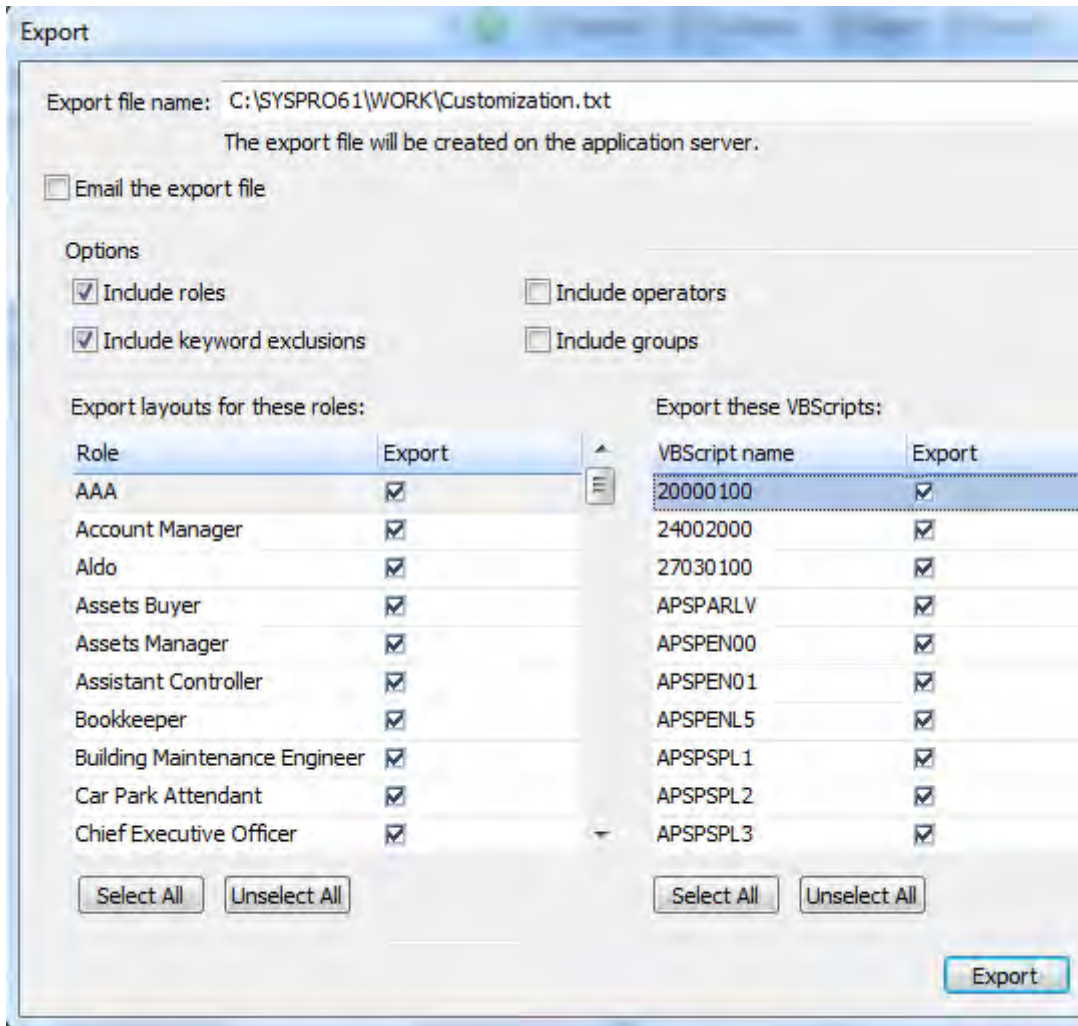
As soon as one program name is supplied for a role, the role restrictions only apply to the supplied program names. If you remove all the program names for a role from this list, the normal role restrictions are re-imposed. You can use the *remove all* hyperlink to remove all program names for a role, or use the *remove* hyperlink to remove a specific program/role combination. **Figure 4-49** shows the *User Interface Override List* where override entries have been added for two roles. These two roles can use all the customization facilities that would normally be available for non-role users with all the programs that do not appear in this list.

Role	Program	Remove
[-] Account Manager		<a href="#">remove all</a>
├	INVBST - Inventory Stock Codes	<a href="#">remove</a>
├	INVPEN - Inventory Query	<a href="#">remove</a>
├	SALP20 - Sales by Product Class	<a href="#">remove</a>
[-] Assets Buyer		<a href="#">remove all</a>
└	SALP20 - Sales by Product Class	<a href="#">remove</a>

**Figure 4-49:** The *User Interface Override List*

On the toolbar at the top of the customization management screen are buttons to expand and collapse all entries in the *Customized Layouts by Role* listview and one to display the *User Interface Override List*. The other two buttons are to export the settings to a text file and to Import them from a file.

The *Export* program consists of three main sections (see **Figure 9-50**). Within the top section are the *Export file name*, *Email the export file* options, together with the *Include roles*, *Include keyword exclusions*, *Include operators*, and *Include groups* checkboxes. Against the *Export file name* prompt you supply the file name for the export file and the path where it should reside. If you do not supply a path the export file is created in SYSPRO's `base` folder. This prompt will be populated with the default folder of your SYSPRO work folder and the file name of *Customization.txt*.



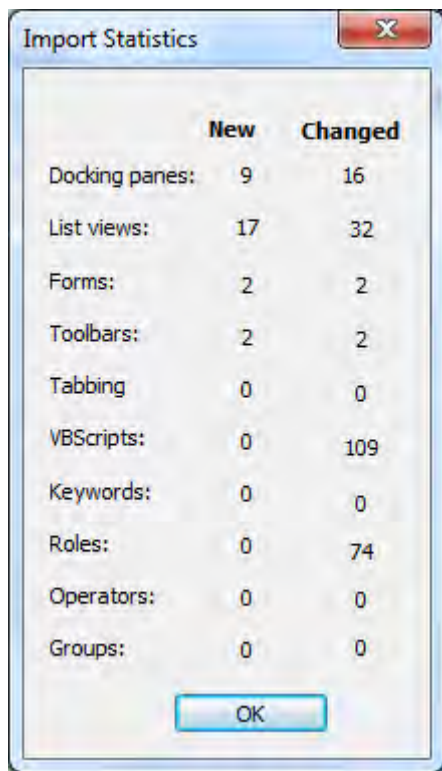
**Figure 9-50:** The selection options for the *Customization Management* export file

If the *Email the export file* checkbox is checked, in addition to the file being saved to the specified location, an email will be created with a subject line of *Customization export file* and the file *SYSPRO\_Customization.txt* will be attached. Note that the option *Fax/mail integration required* must be checked for the email to be created (*Ribbon bar | Setup tab | Security section | Operators | highlight operator code | Change button | Options tab*).

Checking the *Include roles* checkbox adds the details for all roles to the export file. Checking the *Include keyword exclusions* option adds the entries from the *Keyword Exclusions for Listviews* listview to the export file. Checking the *Include operators* option will include basic operator information in the export file; enough to create the operator with its operator group, password, and SQL login. It will not bring through all the settings for operator activities, etc. Checking the *Include groups* option will include the basic information for creating the operator groups, but without the group level security settings.

The left hand section of this screen is where you configure which roles must have their layouts exported. It consists of a listview containing all the roles, with a checkbox against each of them. Only the layouts for the selected roles will be included in the export file.

The right hand section is where you configure which VBScripts must be exported. It consists of a listview containing all the VBScript names with a checkbox against each of them. Only the selected VBScripts will be included in the export file.



	New	Changed
Docking panes:	9	16
List views:	17	32
Forms:	2	2
Toolbars:	2	2
Tabbing	0	0
VBScripts:	0	109
Keywords:	0	0
Roles:	0	74
Operators:	0	0
Groups:	0	0

OK

**Figure 9-51:** The *Import Statistics* screen that is displayed on completion of the import

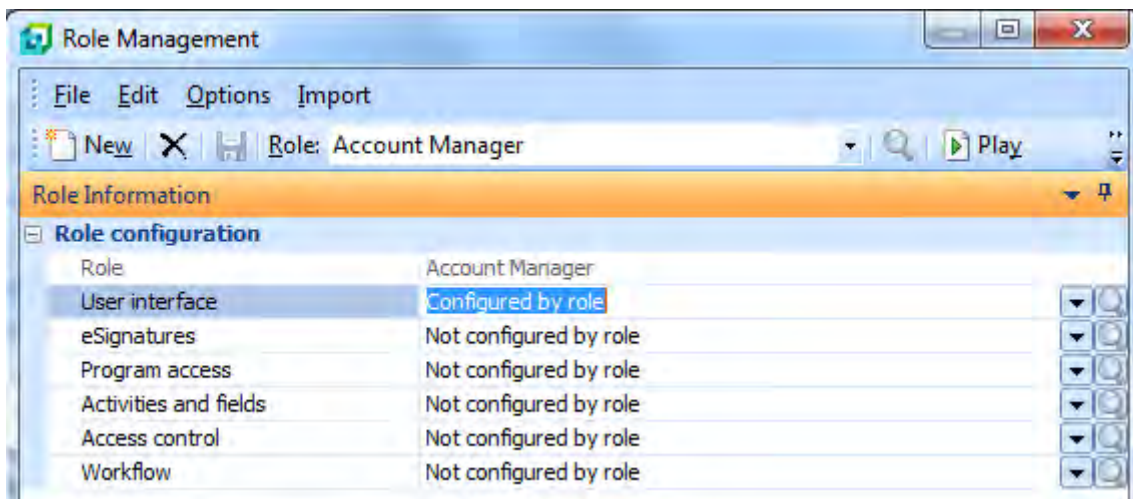
Neither the custom form table nor the scripted fields are exported. Therefore, any scripts that refer to scripted and custom form fields on a form will report errors and/or may not work as expected; this problem might only occur when exporting layouts from one SYSPRO site to another site which hasn't had the same custom form and/or scripted fields created.

The *Import* program prompts for the location (on the server) and file name of the file to be imported. When you click on the import program's *Import* button, any entries that already exist are updated with the new information and new entries are added. Any entries that already exist that are not included in the export file are left as they were. A screen is displayed containing summary statistics from the import file (see **Figure 9-51**).

## Role Management

The *Role Management* program consists of three tabs: *Role Information*, *Operators Linked to Role*, and *Role Usage*. By default, the *Role Information* listview is at the top and the *Operators Linked to Role* and *Role Usage* listviews appear as tabs at the bottom. The *Role Information* tab is used to configure whether certain parts of SYSPRO are configured by role.

**Figure 9-52** shows the *Role Information* listview, with its matching toolbar. The displayed information relates to the role name that appears on the toolbar.

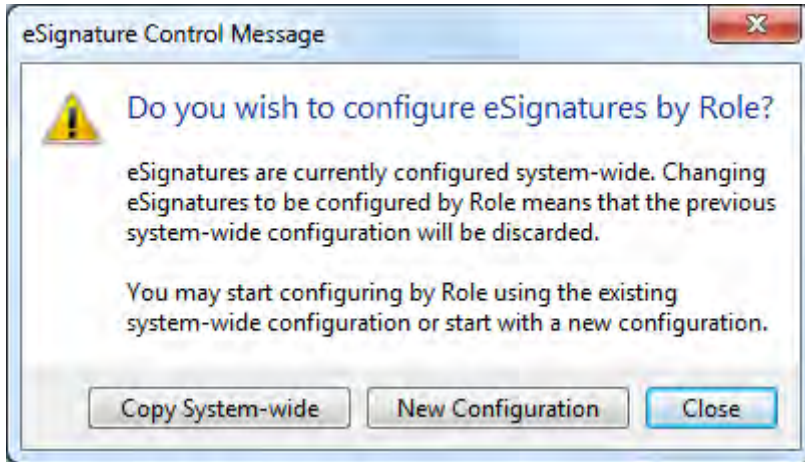


**Figure 9-52:** The *Role Information* section of the *Role Management* screen

Each of the areas of SYSPRO that appear in this listview have a dropdown list and a browse button against them. The dropdown list contains the options *Configured by role* and *Not configured by role*. Each of the browses calls the program relevant to the area they are against. The browse against the



*User interface* entry calls up the *Customization Management* program that is described above, and populates the role in its toolbar with the current role name. The browse against the *eSignatures* entry calls up the electronic signatures" *Setup* program. When you click on this, if the *Configuration level* against the electronic signatures" *Global Configuration* program is set to *System-wide*, you will be prompted on whether you wish to configure eSignatures by role (see **Figure 9-53**).



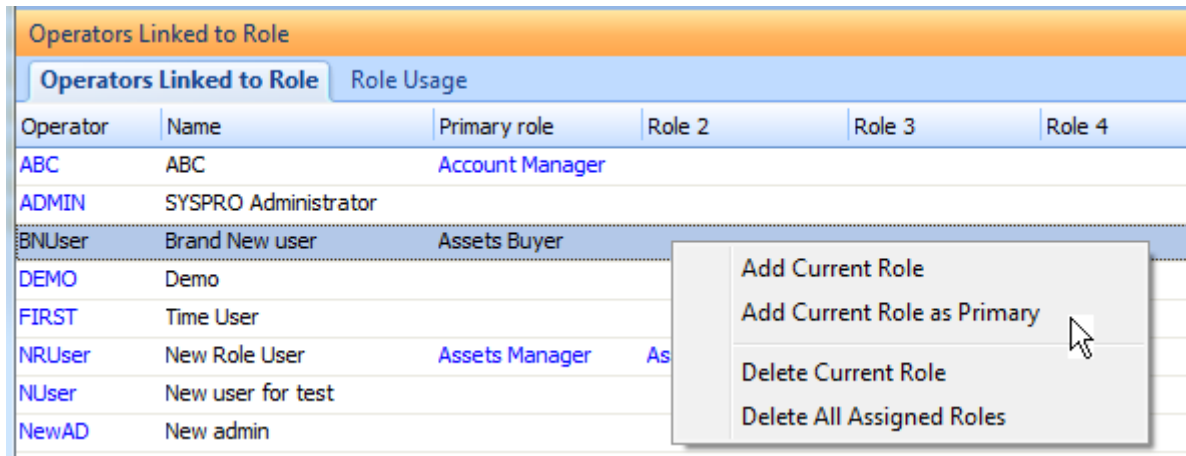
**Figure 9-53:** Using the browse against *eSignatures* when its *Global Configuration* is set to *System-wide*

The browse against the *Program access* entry calls up the *Role Program Access Maintenance* program and populates the role on the toolbar with the currently selected role. The browse against the *Activities and fields* entry calls up the *Role Activities and Fields Maintenance* program and populates the role on the toolbar with the currently selected role. The browse against the *Access control* option calls up the *Role Access Control Maintenance* program and populates the role on the toolbar with the currently selected role. The browse against the *Workflow* entry calls up the *Role Workflow Security Maintenance* program and populates the role on the toolbar with the currently selected role.

The *Operators Linked to Role* listview contains a list of operator codes that exist within SYSPRO. Against the operator codes are columns containing the operator names and up to five roles (*Primary role*, *Role 2*, *Role 3*, *Role 4*, and *Role 5*). The role name that appears against the *Role* prompt in the toolbar at the top of the screen can be added to an operator by right-clicking on the operator code and either selecting *Add Current Role* or *Add Current Role as Primary* option. Clicking on one of the role names that already exists against an operator will replace the role against the *Role* prompt on the toolbar to this one.

**Figure 9-54** shows the *Role Management* screen with the currently selected role of *Bookkeeper*. Right-clicking on the operator code *BNUser* displays a menu with four options: *Add Current Role*, *Add*

*Current Role as Primary*, *Delete Current Role*, and *Delete All Assigned Roles*. Selecting the *Add Current Role* option will add the *Bookkeeper* role to the next available role number for the *BNUser* operator. If this operator already has five roles assigned to it, the request will be ignored. Selecting the *Add Current Role as Primary* will add the current role as the *Primary role*, or replace the existing *Primary role* (if one is present).



**Figure 9-54:** *Operators Linked to Role* tab in *Role Management*

The *Delete Current Role* option removes the role that appears against the toolbar from this operator (if it exists). If this role does not exist against this operator, the request is ignored. The *Delete All Assigned Roles* option removes all roles that appear against this operator code.

The *Role Usage* tab contains the same information as the *Operators Linked to Role* tab; it is just that it is in role sequence rather than the operator code sequence. Where an operator is linked to more than one role, they will appear more than once (see **Figure 9-55**).

Against the *Global Configuration* option on the toolbar (*Options | Global Configuration*) are several settings, the most important of which is *All operators must be assigned to a role*. This is the best way to ensure that all operators have a role against them. If you are using role-based security, and one or more do not have a role against them, you may get unexpected results.

If this is option checked, all new operators must have a role assigned to them when they are created. Existing operators that do not have a role assigned to them will continue to work as before until an attempt is made to modify them in *Operator Maintenance* (*Ribbon bar | Setup tab | Operators | highlight operator | Change* button). At this point you will be prevented from saving the operator changes without assigning a role to this operator.

Role Usage				
Operators Linked to Role		Role Usage		
Role and operator	Operator	Primary role	Role 2	Role 3
<input type="checkbox"/> Account Manager				
└ ABC	ABC	Account Manager		
└ new operator	NewOp	Account Manager		
<input type="checkbox"/> Assets Buyer				
└ New Role User	NRUser	Assets Manager	Assistant Controller	Assets Buyer
<input type="checkbox"/> Assets Manager				
└ New Role User	NRUser	Assets Manager	Assistant Controller	Assets Buyer
<input type="checkbox"/> Assistant Controller				
└ New Role User	NRUser	Assets Manager	Assistant Controller	Assets Buyer
<input type="checkbox"/> Bookkeeper				
└ Brand New user	BNUser	Bookkeeper		

**Figure 9-55:** The *Role Usage* listview



## Afterword

This book has demonstrated how you can customize SYSPRO if you do not possess development skills, or are unable to write VBScript.

The next book in the series - *SYSPRO Power Tailoring : A Developer's Guide* - provides a detailed explanation of what you can achieve if you do possess development skills. Topics covered include: interacting with e.net Solutions business objects, form/listview events and when they fire, and designing your own customized panes. It also contains sample VBScripts.

Every business is unique. Having chosen SYSPRO to run your business, you will inevitably feel the need to make small changes to suit your particular requirements. It could be in the way information is captured, how it is combined with other products, or simply how it is represented when you need to access it.

'Power Tailoring' is the best way to describe the extensive customization capabilities of SYSPRO. These range from changing the font of a caption to adding new fields, using SYSPRO's embedded VBScripting capabilities, embedding user-developed .NET user controls and – last but definitely not least - getting your users to interact with SYSPRO.

This book is the first of a two-part series, and it will show you how to reap the rewards of power tailoring without having development skills.

**Produced by:** SYSPRO Press  
**Reader level:** SYSPRO User

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