Infor System i Workspace AnyWhere

5250 AnyWhere Emulator Designer Guide

Contents

About this guide

This guide covers the features and usage of the Infor System I Workspace AnyWhere's 5250 AnyWhere Emulator Designer product.

> **Caution:** The Infor System I Workspace AnyWhere screen shots within this guide were obtained with the *Infor Design UI Version* option set to **Classic**. If the System Administrator has changed the *Infor Design UI Version* option to **New**, the appearance of the product may differ to the screen shots within this guide, but the documented functionality of Infor System I Workspace AnyWhere will be the same.

Intended audience

Infor System I Workspace AnyWhere administrators and users with good understanding of the System i applications they are designing.

Organization

This table shows the chapters of the guide:

Section	Description
Introduction	Introducing the 5250 AnyWhere Emulator Designer
Authorization	Enabling the 5250 AnyWhere Emulator Designer
Using Designer	The basic features and functionality of the 5250 AnyWhere Emulator Designer
Advanced Features	More advanced features provided by the 5250 AnyWhere Emulator Designer

Section	Description
Step-by-step Example Designs	Examples of using the 5250 AnyWhere Emulator Designer to alter screens

Related documents

You can find the documents in the product documentation section of the Infor Support Portal, as described in "Contacting Infor" on page 8.

Contacting Infor

If you have questions about Infor products, go to Infor Concierge at https://concierge.infor.com/ and create a support incident.

The latest documentation is available from docs.infor.com or from the Infor Support Portal. To access documentation on the Infor Support Portal, select **Search > Browse Documentation**. We recommend that you check this portal periodically for updated documentation.

If you have comments about Infor documentation, contact documentation@infor.com.

Chapter 1   Introduction

Welcome

The 5250 AnyWhere Emulator within Infor System I Workspace AnyWhere allows you to change the standard UI layout and content of an Infor IBM i application screen using a tool called the 5250 AnyWhere Emulator Designer.

For brevity, within the remainder of this guide, we will use the term *Designer* to reference Infor System I Workspace AnyWhere's 5250 AnyWhere Emulator Designer tool.

Within Designer you can alter the current Infor System I Workspace AnyWhere application screen at run-time. Any changes that are made are deployed to other 5250 AnyWhere Emulator users signed into the same Infor System I Workspace AnyWhere Profile.

This guide covers the features and usage of Designer.

General UI Conventions

Within Designer, and screenshots within this guide, are several common User Interface (UI) conventions that are part of the UI tooling that Designer uses, namely the Infor Design System (IDS).

Infor System I Workspace AnyWhere supports three Themes: Light, Dark and High Contrast. All the screenshots in this guide use the Light Theme.

Infor System I Workspace AnyWhere supports multiple colours within its Personalization settings. All the screenshots in this guide use the default Azure colour.

Using the default Light Theme, a focused Edit field, grid row, button, or other focusable element will usually have a with blue border or circle around it, e.g.

Define the Font for this screen:

If a Dropdown List or Edit field has been modified since the field was displayed, you may see an orange triangle in the top-left corner as reminder, e.g.

Action

Set Font ▼

Value

Changed Value ✎

If you restore the field to its original value, the orange triangle will be removed.

If a Dropdown List or Edit field is editable, it will be filled with a white background, as in the screenshot above.

If a Dropdown List or Edit field has been disabled or is not directly editable by the user, it will be filled with a dark grey background, e.g.
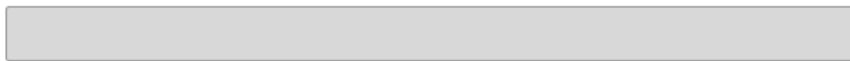
Within Designer, dialogs are displayed as a white windowed area with a heading, e.g.
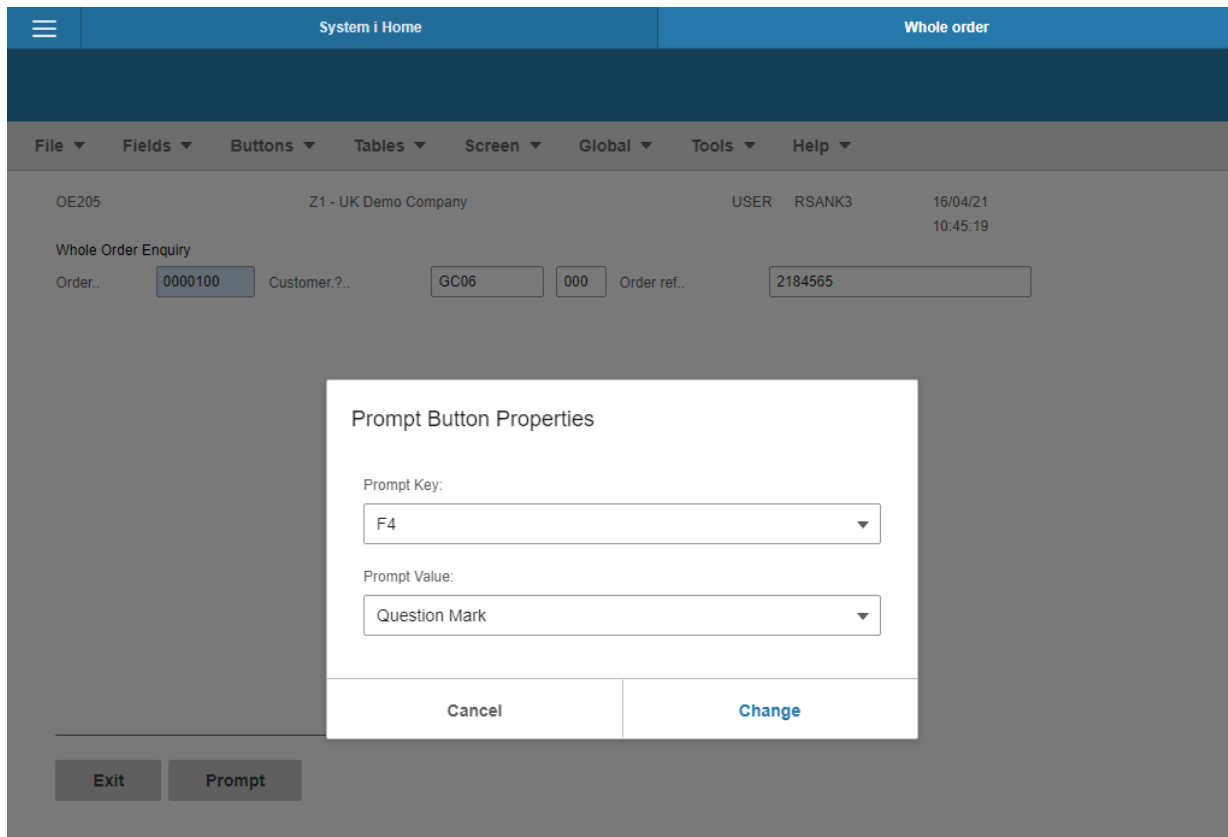
The background of the dialog will be darkened. If you press and hold the left mouse button within the heading, you can move the dialog within the module tab area. Release the mouse button to position the dialog. Dialog positions are not stored and will be returned to their initial position on next display.

The primary action of the dialog will be on the bottom-right of the window and will be coloured blue. Other actions will be coloured dark grey.

If an icon is selectable, it will be coloured a dark shade of grey…

When the mouse cursor is moved over a selectable icon, the image will darken further and after a 1-2 seconds, a tooltip will appear, describing the function of the icon, e.g.

When an icon is disabled, it will be coloured a pale shade of grey and will not change when the mouse is move over it, e.g.

In a Dropdown List, you may type into the list to filter the content of the List to only items containing an exact match of what has been typed, e.g.

In any IDS grid or list control, some items will only work, or become enabled, when an item within the list is selected and highlighted, e.g., without a selected row…

Rules

When the current application is Equal To PL and when the current taskcode is Equal To 2040 then compress empty rows of data (Whites
When the host Message Dialog text Contains the Value roll up or down past then auto-dismiss the Host Message Dialog.

…only one item within the grid's toolbar is enabled (to add a new entry), but with a row selected within the grid…

Rules

When the current application is Equal To PL and when the current taskcode is Equal To 2040 then compress empty rows of data (Whites
When the host Message Dialog text Contains the Value roll up or down past then auto-dismiss the Host Message Dialog.

…the other items within the grid's toolbar become enabled (usually because they perform an action on the selected row, such as edit its properties or delete it from the grid).

Chapter 2   Authorization

Enabling Designer

System i Manager

A Infor System I Workspace AnyWhere user will only be able to use the Designer if they are authorised to the "Workspace Designer" task within System i Manager.

The Designer task and menu option are delivered as part of the System i Manager application.

Authorise users

In System i Manager, to authorise a user to use Designer, you must…

- Log on to your IBM i with an account that has sufficient authority to edit user profiles within System i Manager (e.g. **AULADMIN**).
- Run the command **MNTUSER**.
- Enter the name of the user profile that you wish to authorise to Designer and press *Enter*.
- Select *F17 (Shift – F5) – Menu Authority*, and ensure the user is authorised to the Designer task (task number 11) within the **WSADMIN** menu in the required environment(s).
- Press *F3* to exit.

Repeat for all users you wish to authorise. This authorisation is global for all environments and companies.

Caution: Whilst authorisation to the Designer task is per System i Manager Environment, any changes made using Designer will apply to all environments defined within the current Infor System I Workspace AnyWhere Profile.

Infor recommends that for Designer development and testing, you create a Infor System I Workspace AnyWhere profile that does not contain any live environments.

You can move screen designs between Infor System I Workspace AnyWhere Profiles using the Infor System I Workspace AnyWhere Emulator Administration interface (see the Infor System I Workspace AnyWhere Installation and Admin guide).

Infor System I Workspace AnyWhere

By default, Designer is enabled for each profile defined within the Workspace Configuration -> Profiles section of the Infor System I Workspace AnyWhere Administration webpage (E.g. http://hostname.domain/systemi/admin.html). Before proceeding, ensure that this is still the case.

Please refer to the Emulator Settings section of the Infor System I Workspace AnyWhere Installation and Admin Guide for more details.

You will now need to update Infor System I Workspace AnyWhere with the System i Manager changes made in the previous section. In your browser, run the Application Manager -> Update Definitions section of the Infor System I Workspace AnyWhere Administration webpage (E.g. http://hostname.domain/systemi/admin.html). Select the applicable Infor System I Workspace AnyWhere profile in the list box and then check the *Update main Application Manager Definitions* check box and select the user-profiles in the "Users" list that you have authorised. Click Update and wait for the process to complete.

Now, when you log on to Infor System I Workspace AnyWhere using an account that is authorised to Designer, and run a 5250 AnyWhere Emulator task, you will see a toolbar appear above the current 5250 AnyWhere Emulator screen containing the *Design This Screen* icon, e.g.
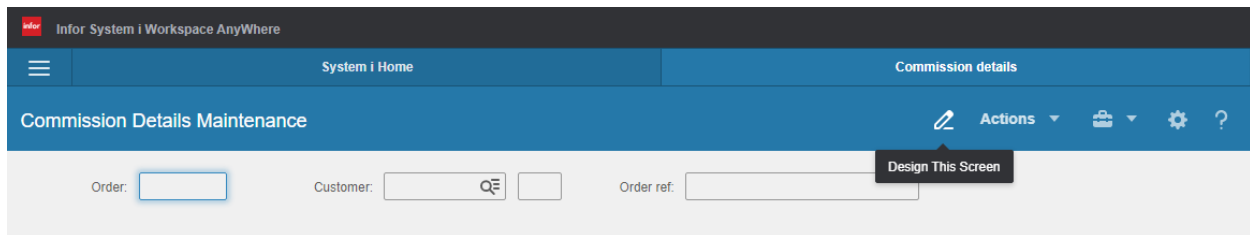
Click on the *Design This Screen* icon to start Designer.

> **Caution:** Only IBM i application screens that contain a hidden reference field, known as *Magic Number,* can currently be designed. If the current screen has no Magic Number, the *Design This Screen* icon will be disabled (e.g. you cannot design standard IBM i OS/400 screens).

Chapter 3   Using Designer

Overview

On starting Designer, interaction with the current IBM i application is suspended. The IBM i program will remain active, but no mouse or keyboard input will be sent to the IBM i server until the user exits Designer.

We will refer to this as "Design-time" and the normal usage of using the IBM i application screen within Infor System I Workspace AnyWhere as "Run-time".

Caution: There are some Designer features previously available within the System i Emulator that cannot be implemented within the 5250 AnyWhere Emulator due to technical and security limitations of using web technologies. These limitations are documented in Appendix A

The Designer Interface

The current IBM i application screen is displayed with the addition of a menu at the top and the Status widget to the right-side of the screen.

If the Designer settings *Compress Whitespace, Compress Whitespace, except in Tables/Group Boxes* or *Compress space between buttons* are currently enabled, they will be temporarily disabled whilst within Designer. Any buttons hidden by Global, or Screen Rules will be displayed.

The font used in Designer's IBM i application screen display will depend on the existing Screen and Global design changes. If a font has been defined for the current screen (via the *Override the Font* setting, described later in this document), that will be used. If no font has been defined for the current screen, but there is a font defined by a Global Rule (described later in this document), with no Tests defined, then that will be used. If neither of the design elements are set, then the user's current font preference will be used.

There are three types of fields; read-only text, which we will call Label Fields; areas where text can be entered, which we will call Edit Fields; and user action that represent IBM i function keys, which we will call Button Fields.

Caution: In IBM i Applications, an Edit Field can be set to read-only programmatically (or via Designer) preventing the user entering data into it. In Designer, and for the purpose of this manual, we will still refer to this as an Edit Field.

The display is divided up into an 80 by 24 grid (or a 132 by 27 grid if the IBM i program uses that output orientation). The grid square (or cell) in the top-left corner is position 0, 0. The grid square (or cell) in the bottom-right corner is position 23, 79 (or 26,131). Fields are aligned to cells within the grid.

Each IBM i application screen has a hidden reference field, known as a *Magic Number*. Design data is stored and re-applied using the *Magic Number* as its key.

Selecting Fields

Using the mouse, you can left click on any label, edit, or button field within the display. The field background will change to denote it is the selected field, e.g.

Customer.........?..   1

This will cause the Status widget to update with the appropriate field detail and the menus to change their content to reflect the type of field selected, e.g.

Status

Field Type:

Output (3,1)

Field Position: Field Length:

3,1   20

Selected Fields:

1

You can select more than one field by holding down the Shift key on the keyboard and clicking the left mouse button within other fields to add them to the selected fields set. Again, the background will change for all the selected fields, e.g.

Customer.........?..   1
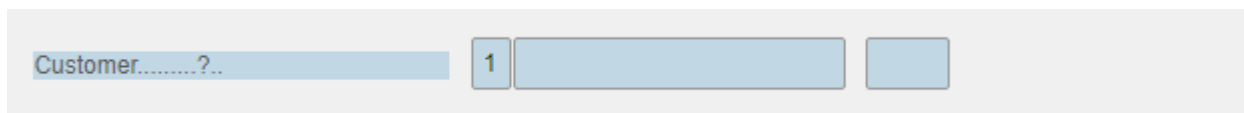
In the Status widget, the number within the *Selected Fields* field is updated accordingly, e.g.

The other Status widget information reflects the last selected field.

To remove a field from the current selected fields set, hold down the Shift key on the keyboard and click on the field with the left mouse button. The field background highlight will be removed to show it has been unselected, and the selected fields in the Status widget will be reduced to show the new selection count.

When you select more than one field, based on the field type (or types) you select, the Designer menus will change, restricting the actions you can perform to only those valid for the selection.

To unselect all fields, click in an unused section of the screen without the Shift key pressed.

You can also select multiple fields by dragging the selection rectangle around them. To do this, press and hold the left mouse button within an unused section of the display near the fields you want to select. Without releasing the left mouse button, move the mouse to expand the shaded rubber-band rectangle, e.g.

As you move the mouse, a badge control is placed next to the mouse cursor showing the cell row and column that the mouse button was first pressed in (labelled Start), and the cell row and column that the bottom-right corner of the rubber-band area is currently on (labelled End). This is to aid in more accurate selection of fields.

Caution: The rubber-band can be dragged outside the Designer canvas, but the maximum end row/column values cannot exceed, and will be adjusted down to, the IBM i application screen row/column dimensions.

When all the fields you want to select are intersected by the rubber-band rectangle, release the left mouse button, and the fields will be marked as selected, and the Status widget *Selected Fields* field will also be updated, e.g.
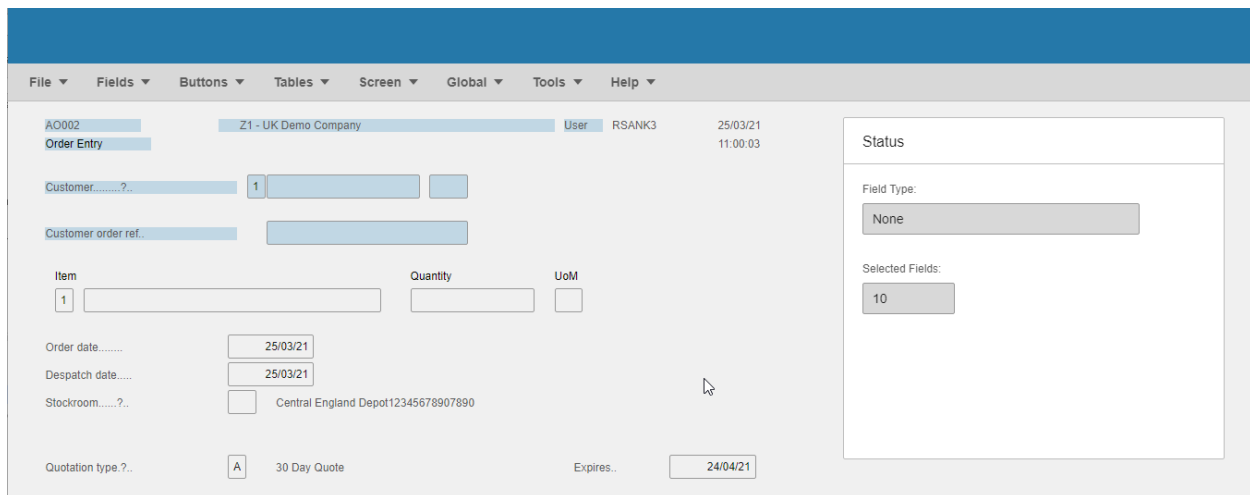
The File Menu

There are four options within the File menu…

Option	Description
Reset	This will remove all design changes for the current application screen. You will be prompted to confirm the reset, e.g.
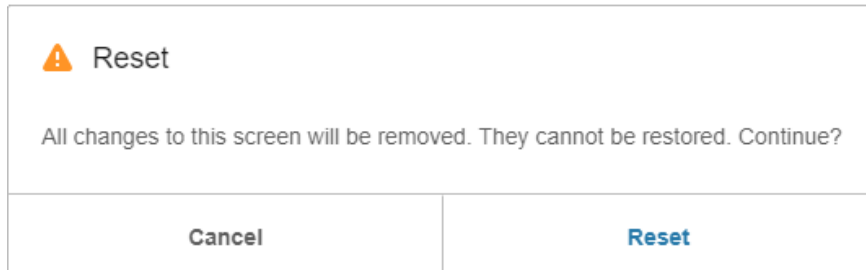
Select *Reset* to reset any design changes made to this application screen.

Select *Cancel* to abort the reset action.

Note that the behaviour of this option changes if you are using Infor's Screen Design Templates (see later section).

Option	Description
Import Existing Screen Design	This will allow you to import a screen design from another similar screen to "quick-start" your design process. See the *Importing an Existing Screen Design* section in Chapter 4 for more details.
Save	This will save any design changes for the current application screen to the Infor System I Workspace AnyWhere server, making them available to all users. If your current Infor System I Workspace AnyWhere Profile has multiple environments defined, you will see the following warning…
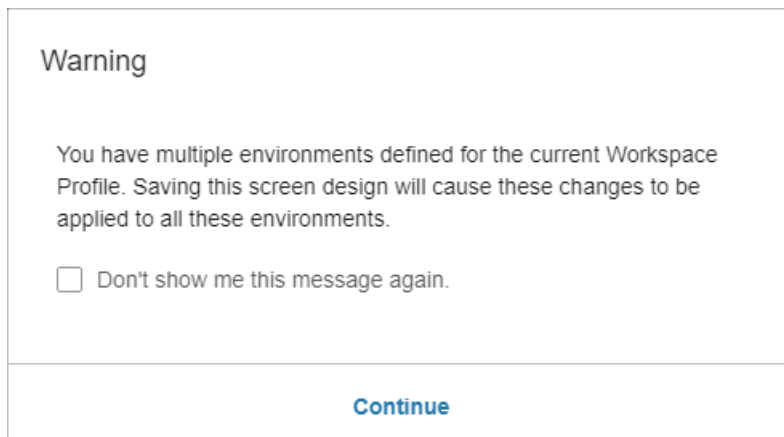
Tick the *Don't show me this message again* check box if you do not wish to see this message each time you save a design.

Click *Continue* to continue.

Option	Description
Exit	If you have made no changes to the application screen, this will end your Designer session.
	If changes have been made, but not saved, you will be prompted whether you wish to save them now or discard them, e.g.

⚠ Save

You have made changes to the panel that are not saved.

Do you wish to save the changes now?

| Cancel | No | **Save** |
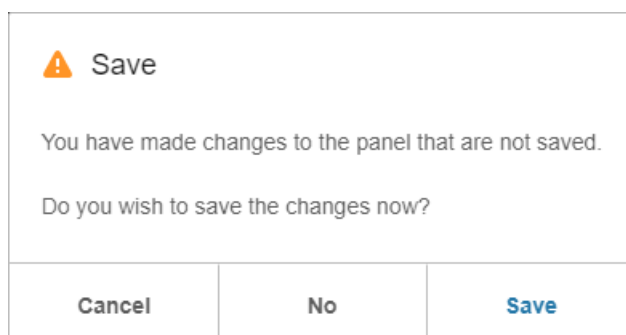
Select *Save* to save the changes and exit Designer.

Select *No* to discard any changes made in the current Designer session and exit Designer.

Select *Cancel* to abort the exit procedure and return to Designer.

If Designer Versioning is enabled for the current Infor System I Workspace AnyWhere Profile, you may see an additional dialog during the save process. For more details, see the *Adding Version Comments* section.

Caution: All users of the 5250 AnyWhere Emulator, signed into the same Infor System I Workspace AnyWhere Profile, will pick up saved Designer changes the next time their screen display is refreshed (I.E., they enter the changed screen from a different screen or perform any action within the screen that causes data to be sent to and from the IBM i server).

Users do not have to sign out of Infor System I Workspace AnyWhere to get the latest changes.

The Tools Menu

There are two options within the Tools menu…

Option	Description
Options	Open the Designer UI Options dialog to change the grid visibility and background color. See Designer UI Options section.
Hide Status Widget	Toggle the visibility of the Status widget. If the Status Widget is hidden, this menu option will change to Show Status Widget.

> **Caution:** The visible state of the Status widget is saved into your Web Browser's storage when you exit Designer and restored the next time you run Designer within the same Web Browser.

Designer UI Options

Selecting *Options* from the Tools menu will display the Designer UI Options dialog …

Designer UI Options

☐ Show Grid

Designer Background Colour:

Cancel   Apply

Field	Description
Show Grid	Check this option to show a dashed-line grid showing the distinct row/column positions. By default, this option is unchecked (dashed-line grid is turned off).

Field	Description
Designer Background Color	Click the down-arrow icon to the right-side of the field to open the color-picker drop down panel containing a set of common color options.
	Select the white box with a red line through it to clear the background color (this is the default).
	An RGB hex value can also be entered using the keyboard (e.g. F400A2).
	The color selected within the color-picker will be used as the background color of the design area whilst inside Designer, making it easier to see the designable area of the current t IBM i application screen.

Select *Apply* to apply any changes to the Designer UI Options.

Select *Cancel* to discard any changes.

> **Caution:** Any Designer UI Options settings you apply will be saved into your Web Browser's local storage and re-applied the next time you use Designer within the same Web Browser.

Context Menus

As well as accessing Field and Button options the menu bar at the top of the Designer interface, you can press the right mouse button on any Label, Edit or Button field to access a context sensitive menu that will show actions dependant on the field type, e.g.

Label Field

Customer

Edit Text

Custom   Hide Field

Item   Change Width

1   Use As Part Of Window Title

         Use As Part Of Window Record ID

Order d Use As Part Of Tab Title

Despat   Add Tooltip

Stockr   Edit Attributes   England Depot12345678907890

Quotati Edit Alignment   Quote

         Edit Field Format

         Edit Hyperlink Definition

         Save To Variable

         Set From Variable

Quantity
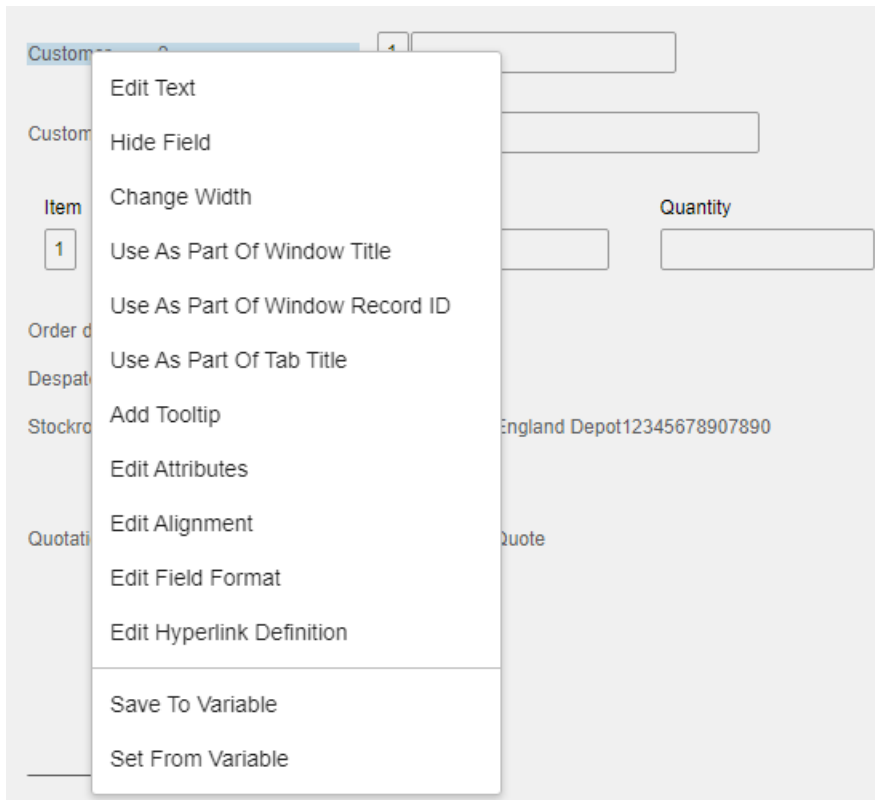
Edit Field
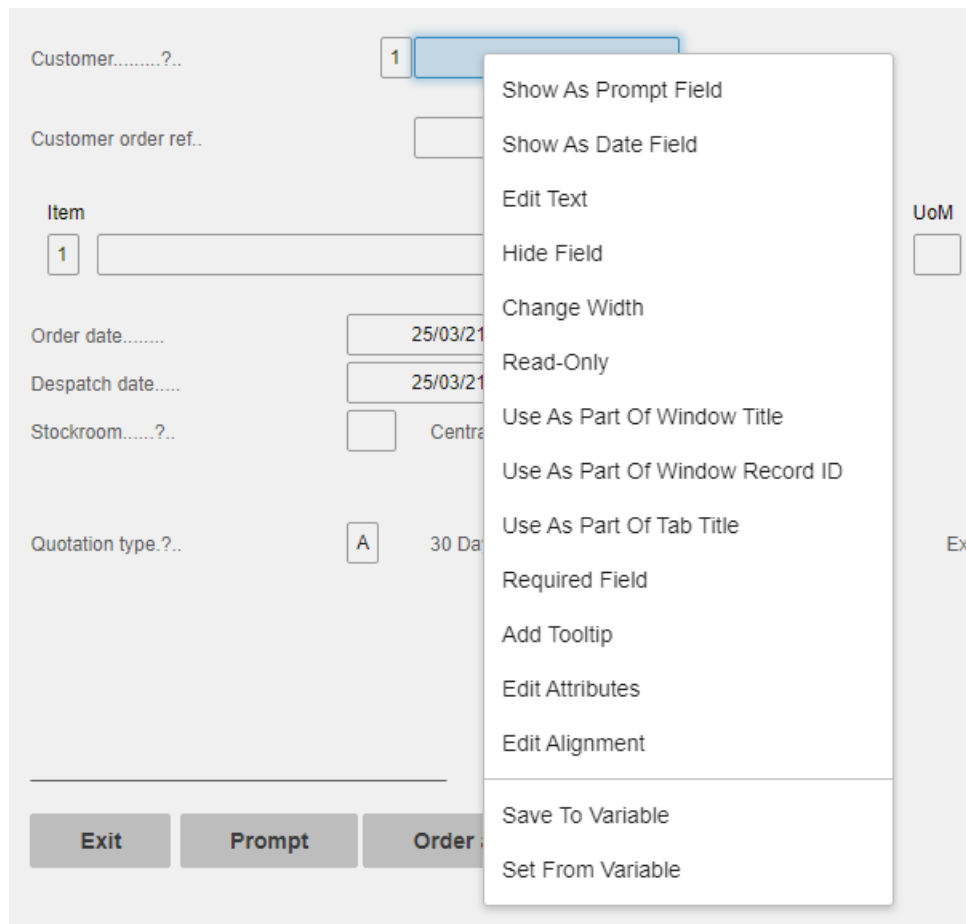
Button Field
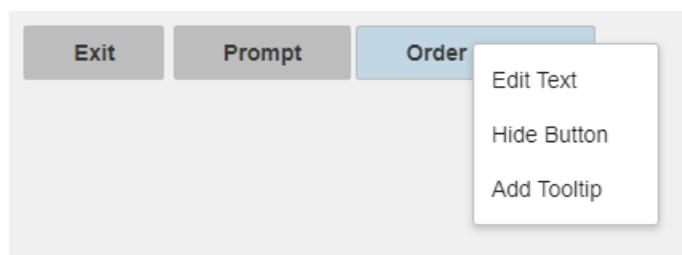
Right-clicking on a field will also select that field and update the Status widget with the appropriate field information.

You can also open the context menu for multiple fields by dragging the selection rectangle around them. To do this, press and hold the right mouse button within an unused section of the display near the fields you want to select. Without releasing the right mouse button, move the mouse to expand the shaded rubber-band rectangle. When you release the right mouse button, any fields within the

rubber-band rectangle will be selected, and, based on the select field types, the appropriate context menu options will be displayed, e.g.

Fields of The Same Type (Edit)

Fields of The Same Type (Label)

AO002   Z1 - UK Demo Company
Order Entry

Customer.........?..   1

Customer order ref..

Item

1

          Hide Selected Fields

Change Width

Make Same Width

Use As Part Of Window Title

Use As Part Of Window Record ID

Use As Part Of Tab Title

Edit Attributes

Edit Alignment

Edit Field Format

Edit Hyperlink Definition

Order date........

Despatch date.....

Stockroom......?..   678907890

Quotation type.?..
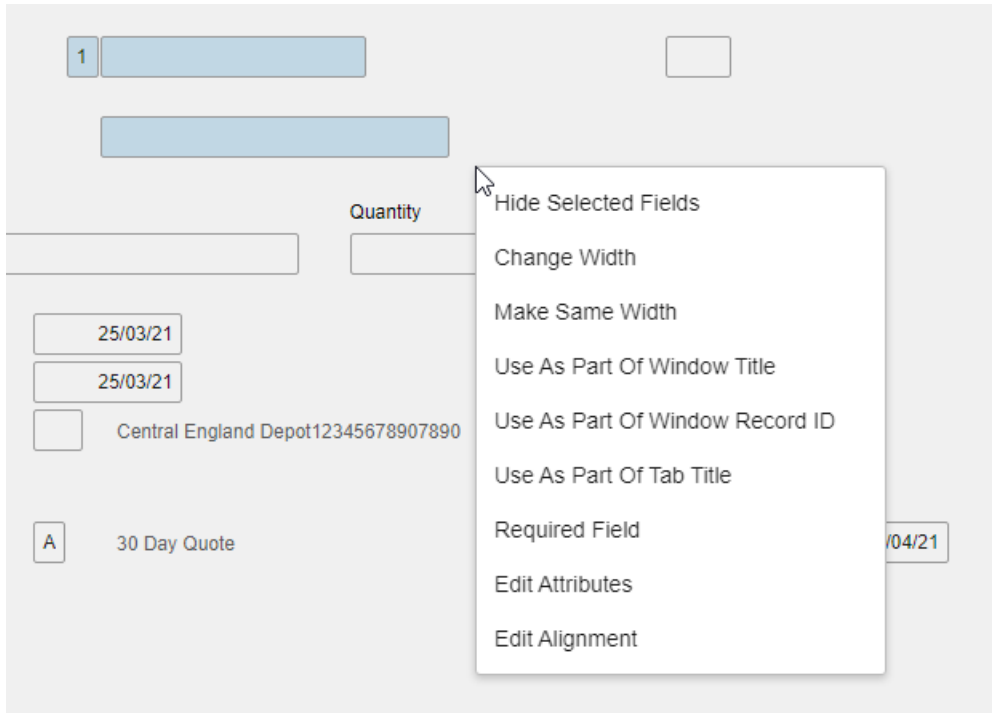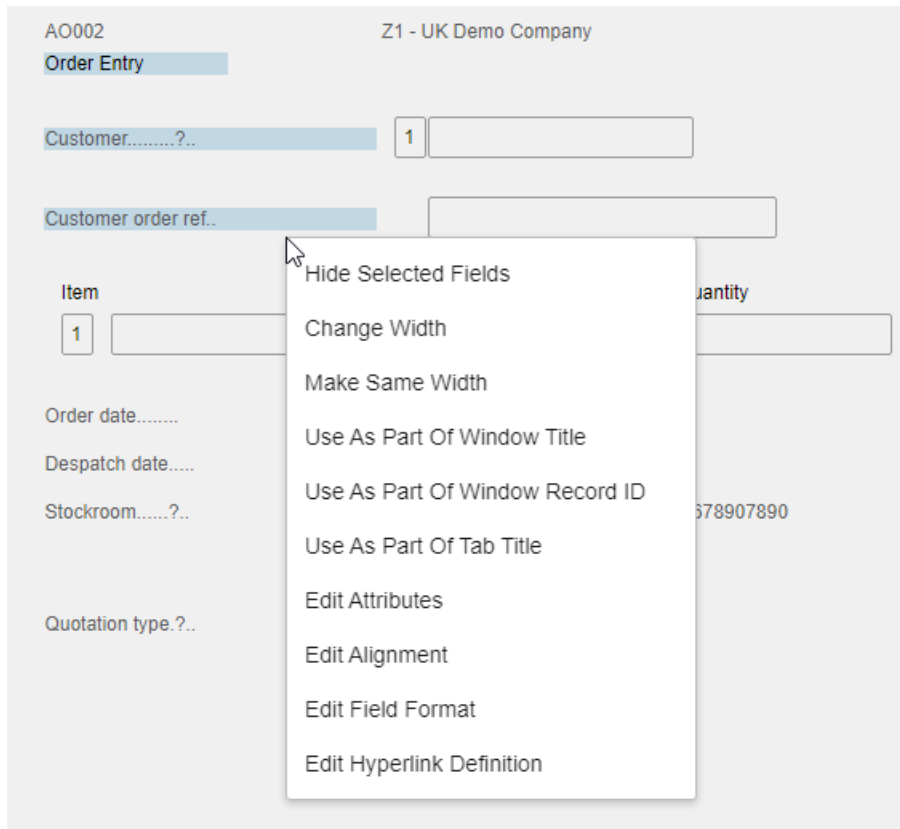
Fields of Different Types (Edit and Label)
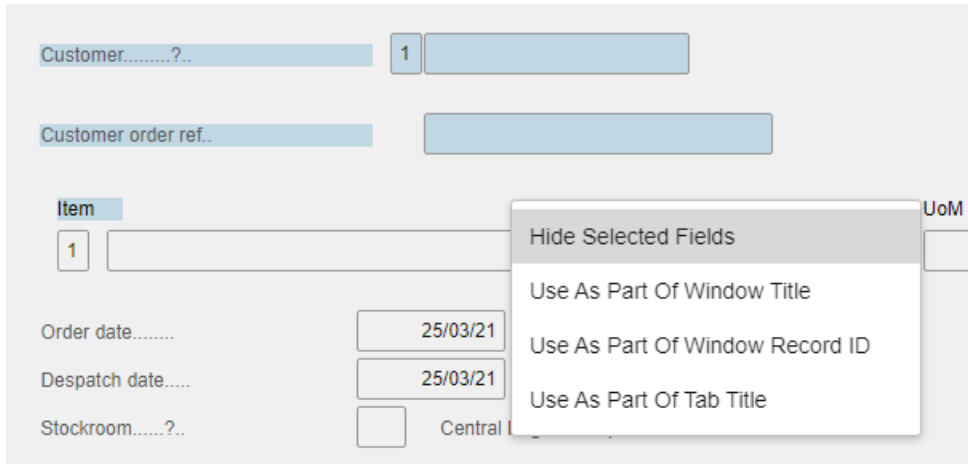
> **Caution:** If you have selected multiple fields using the left mouse button (as described in the *Selecting Fields* section above), and then want to open the Context Menu to apply changes to all the selected fields, hold down the **Shift** key before clicking the right-mouse button to preserve your field selection before the menu is opened.

Designing an Application Screen

Moving Any Field

To move a field, move the mouse cursor over the field and press and hold the left mouse button down. The background rectangle showing the position and extent of the field will change to a darker shade and a badge will appear at the bottom-right corner of the field showing its current row/column position, e.g.
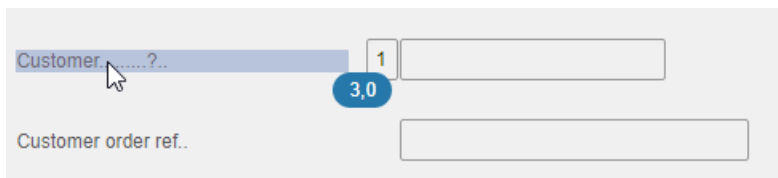
With the left mouse button down, move the mouse within the application screen. The shaded area representing the field will move with the mouse, and the badge row/column will update to the new row/column position of the field, e.g.
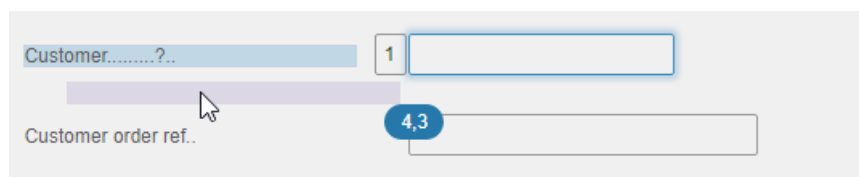
When you have moved the field to the position you require, release the left mouse button to re-position the field, e.g.
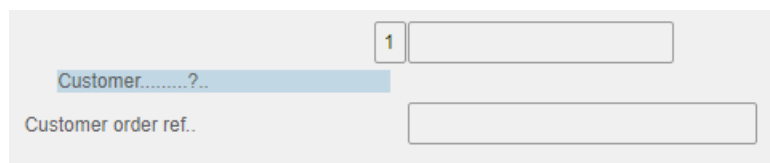
The field will be moved and stay selected, the badge will be removed, and the Status widget updated with the new Field Position details, e.g.
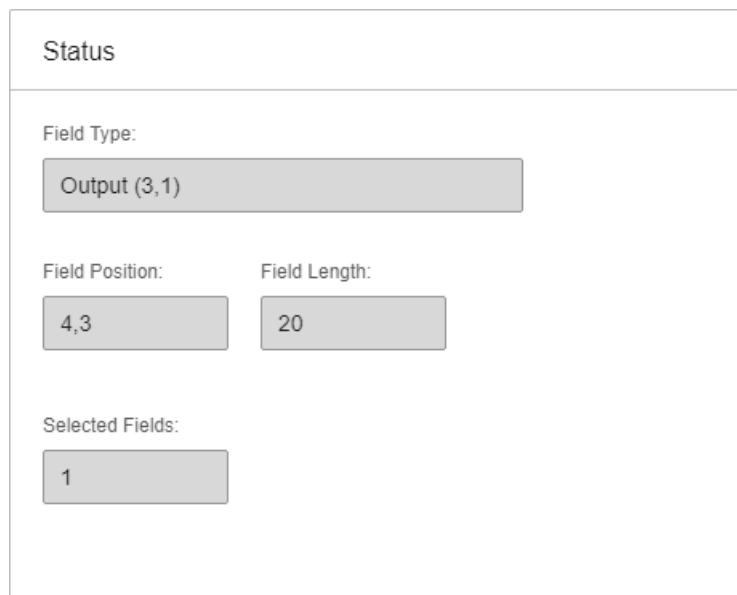
There are some positions on the application screen where you are not allowed to move a field to (such as over an existing field). When you are dragging the field over one of these positions, the mouse cursor will change from an arrow to a "stop" icon to show that the action is not supported, and the badge will change red and show an appropriate message, e.g.
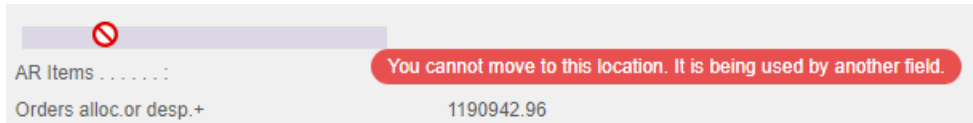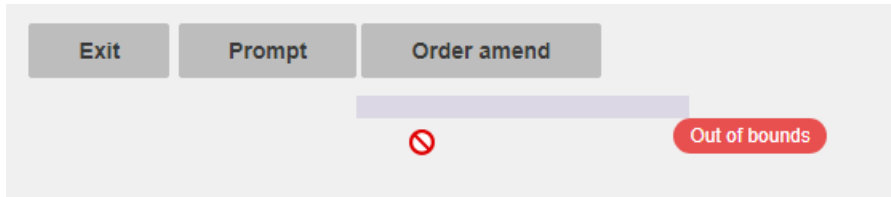
> **Caution:** The exact "stop" icon used will change depending on the cursor images you are using and the version of your operating system.

If you release the left mouse button whilst the "stop" icon is showing, then the field position will not change.

Reset Any Field

If you have made changes to a field, within Designer, and you wish to remove them and restore the original IBM i application field display characteristics, then you can use the *Reset* option.

To do this, select one or more fields, of any type, including buttons, and select the *Fields – Reset* menu item. You will be prompted to confirm the removal process, e.g.
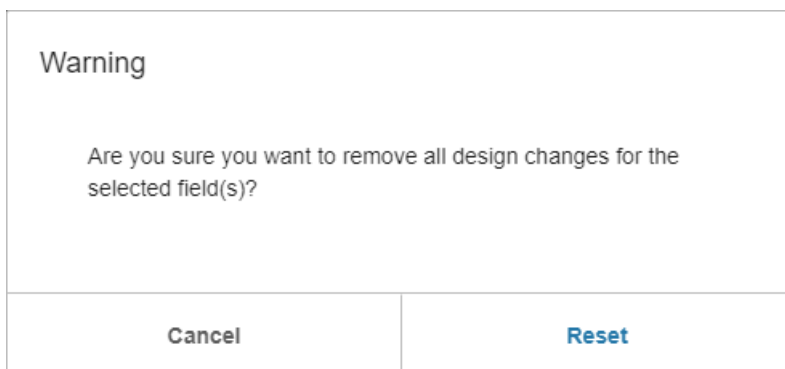
Select *Reset* to reset all the selected fields to their original IBM i application values.

Select Cancel to keep the selected fields design changes.

Changing Label/Edit Field Text

In Designer, text overrides are configured in relation to the available Infor System I Workspace AnyWhere languages. You can either set text for **All Languages**, which will be applied at run-time regardless of the language the Infor System I Workspace AnyWhere user has logged in as, or set different text values for each language, which will only be applied at run-time when users log in with that specific language.

To change the text of a Label or Edit field, select the field with the left mouse button and then select the *Fields – Edit Text* menu item or, press the right mouse when the mouse is over the field and select *Edit Text* from the context menu. This will show the *Edit Field Text* dialog, e.g.

Edit Field Text

+ 🖉 🗑

Cancel | **Apply**
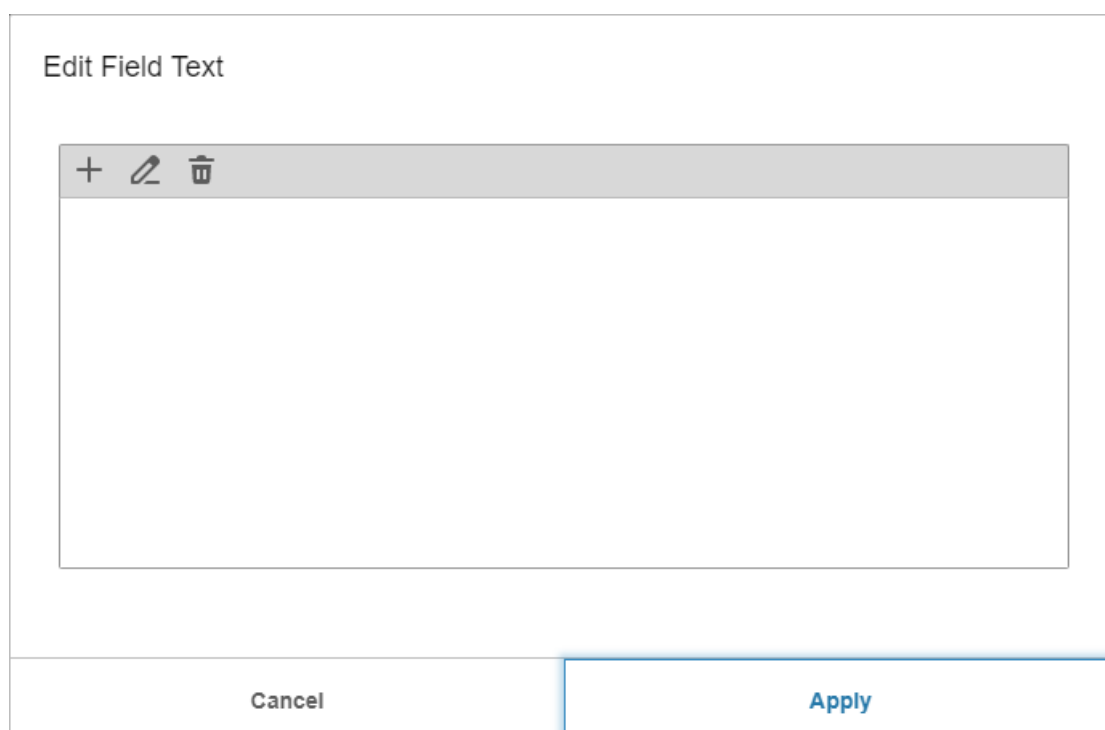
Initially, there will be no text overrides for the selected Label or Edit field, and the list box will be empty. This denotes that the text shown on the screen comes direct from the IBM i application.

To add a new text override, click the *Add Text Override* icon +. The *Add Text Override* dialog will open, e.g.

Add Text Override

Locale

All Languages ▼

Enter Text Override

Customer.........?..

Or Select Field To Set Text From

▼

Cancel	Apply

Use the *Locale* field to select the language for this text override or use the **All Languages** option to apply the text override to the field regardless of what language the user has signed in to Infor System I Workspace AnyWhere as.

Use the *Enter Text Override* field to change the text of the field to a new value. By default, for a new text override, the current field content is populated into the field.

If instead of entering a text override, you may wish to set the text of the selected field from another field within the IBM i application screen, use the *Or Select Field To Set Text From* dropdown list field to select the screen field to use.

> **Caution:** If the text override is set from the *Or Select Field To Set Text From* field, then any changes made to the *Enter Text Override* field will be ignored when applied.

Click *Cancel* to close the *Add Text Override* dialog and abort any changes.

Click *Apply* to close the *Add Text Override* dialog and update the *Edit Field Text* dialog with the new text override entry change, e.g.

Edit Field Text

+ ✎ 🗑

French: Compte:

Cancel   **Apply**

You can add multiple text overrides, whether manual or from another field, for different languages, e.g.

Edit Field Text

+ ✎ 🗑

French: Compte:

Spanish: Row: 0 Column: 1 (AO002)

All Languages: Account:

Cancel   **Apply**

Caution: Once a text override has been created for a language, you will not be able to define another text override for the same field for that language.

To change an existing text override, first click on the text override in the list to select it, which will highlight the selected row, e.g.

Edit Field Text

+ 🖉 🗑	
French:	**Compte:**
Spanish:	Row: 0 Column: 1 (AO002)
All Languages:	Account:

| Cancel | Apply |

Once selected, to change the text override, click the *Edit Text Override* icon 🖉 . The *Edit Text Override* dialog will open, e.g.

Edit Text Override

Locale

French

Enter Text Override

Compte:

Or Select Field To Set Text From

Cancel   **Apply**

When editing an existing text override, the *Locale* field is displayed, but cannot be changed.

The behaviour of the *Enter Text Override* and *Or Select Field To Set Text From* fields and the *Cancel* and *Apply* actions is the same as in the *Add Text Override* dialog described above.

To delete a text override, select the override within the *Edit Field Text* dialog's list, so that it is highlighted, and then select the *Delete Text Override* icon 🗑 . The highlighted row will be removed from the list.

If either of the *Edit Text Override* or *Delete Text Override* buttons are clicked when no row in the *Edit Field Text* dialog's list of text overrides is highlighted, then no change will be performed.

Select *Cancel* to close the *Edit Field Text* dialog without making any changes to the text of the selected Label or Edit field.

Select *Apply* to close the *Edit Field Text* dialog and confirm the text override changes. The selected Label or Edit field will be updated with the text change that is appropriate to the language you signed into Infor System I Workspace AnyWhere with, or, if the text override for the current language has been removed, or all text overrides have been removed, the original Edit or Label text will be restored.

Changing Button Field Text

The *Edit Field Text* dialog works the same as for Label and Edit fields but there are some constraints for Buttons that must be adhered to.

For a Button, on opening the *Edit Field Text* dialog, you will see the Button label preceded by the associated function key, e.g.

Add Text Override

Locale

All Languages ▼

Enter Text Override

F13=Order amend

Cancel   **Apply**

You can set the text for different languages, as with Labels and Edit fields, but when you do, you must maintain the function key text and equals sign if you want the Button to continue working, e.g.

Add Text Override
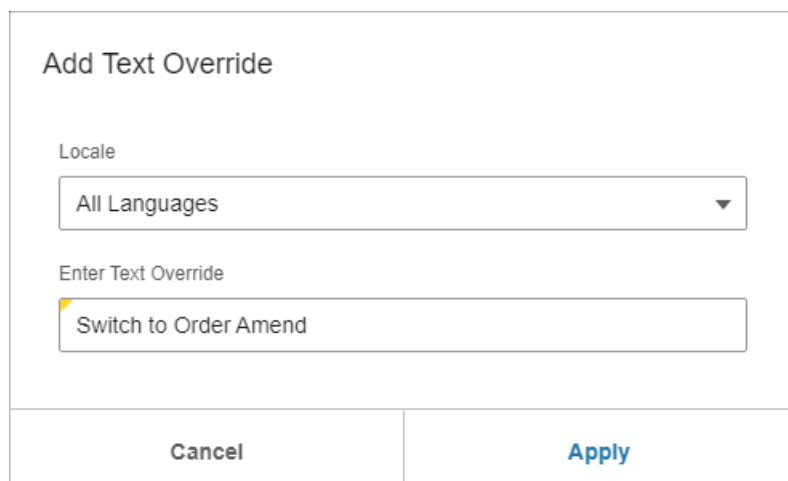
Locale

All Languages ▼

Enter Text Override

F13=Switch to Order Amend

Cancel   **Apply**

The amendment above is correct, but the following amendment is incorrect…

Add Text Override

Locale

All Languages ▼

Enter Text Override

Switch to Order Amend

Cancel | Apply

Removing or leaving out the Fxx= will not remove the Button from the screen but will cause the Button to stop functioning at run-time when clicked.

> **Caution:** Changing the function key value of a Button will not change the way the underlying IBM i application behaves. For example, if you changed the Button label F3=Exit to F1=Exit it will not mean that pressing the F1 key will now perform the Exit function.

> **Caution:** Removing the Fxx= text from a button label will not block the corresponding function key from being available for users to use. To remove the button **and** block the function key, use the Screen or Global Rule functionality described later within this document.

Show a Label/Edit Field as Part of the Window Title

To assign a Label/Edit field as the main title within the 5250 AnyWhere Emulator Page Header, which we will refer to as the Window Title, select the Label/Edit field with the left mouse button and then select the *Fields – Use As Part Of Window Title* menu item or, press the right mouse when the mouse is over the field and select *Use as Part Of Window Title* from the context menu. The *Edit Fields Used For Window Title* dialog will be displayed, e.g.

Edit Fields Used For Window Title

+ ✎ 🗑 | ↑ ↓

Field (1,1): Order Entry

Close
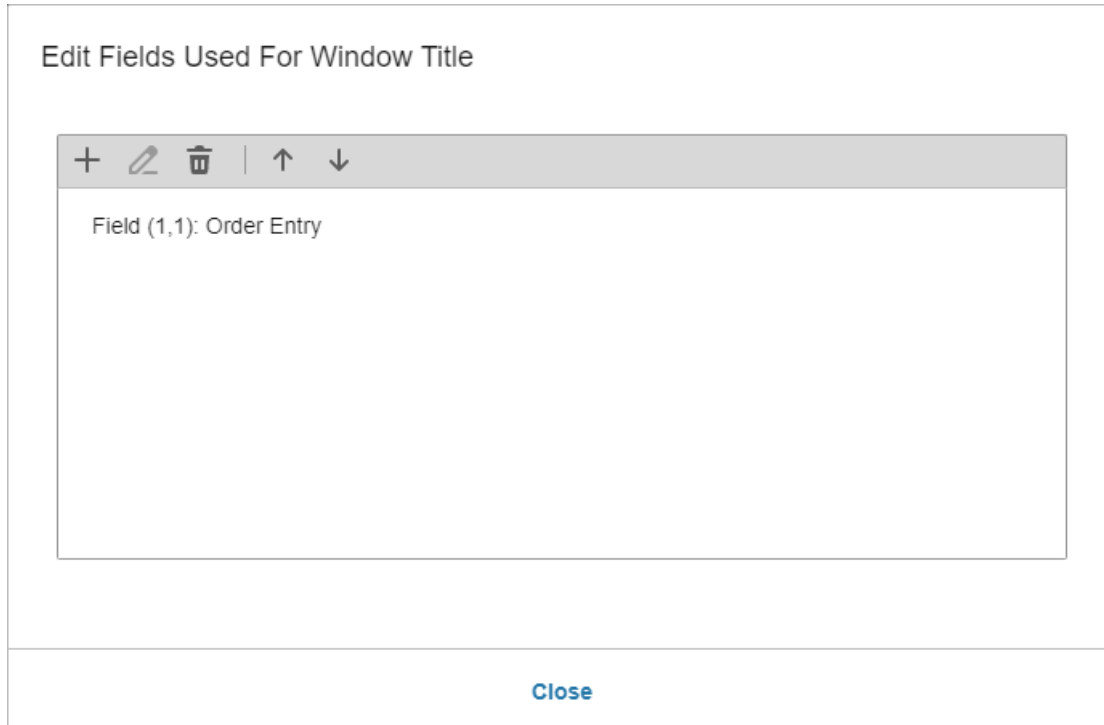
The list contains all the fields that will be used as part of the Window Title, in descending order of where they will appear (displayed from left to right within in the Window Title).

To add another field or Designer Variable to the Window Title, select the *Add Field To List* icon ➕. The *Select Field* dialog will appear, e.g.
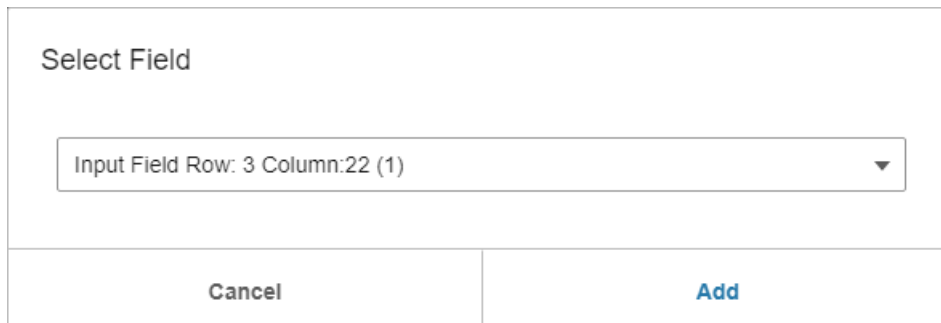
Select Field

Input Field Row: 3 Column:22 (1)   ▼

Cancel   Add

Select a field or Designer Variable from the drop-down list.

Select *Add* to accept the field or Designer Variable as part of the Window Title.

Select *Cancel* to return to the *Edit Fields Used For Window Title* dialog without adding any field.

To remove an existing Window Title field, select the field or Designer Variable within the list and then select the *Remove Field From List* icon 🗑.

To change the order of items within the list, select an item in the list and use the *Move Up* ↑ and *Move Down* ↓ icons. You can also click and hold the left mouse button on the ⋮ icon to the left of the list entry and drag it to change the field order within the list.

Select *Close* to apply the selected field(s) to the Window Title.

At design-time and run-time, the field(s) and/or Designer Variables listed in this dialog will be displayed to the left of the 5250 AnyWhere Emulator module frame, e.g.

If this field is already being used as part of the Window Title, it will not be available in either the *Fields* menu or context menu.

The *Edit Fields Used For Window Title* dialog can also be accessed via the *Fields – Edit Window Title Fields* menu option to allow you to alter a new or existing setup.

Show a Label/Edit Field as Part of the Window Record ID

The Window Record ID identifies the specific record being displayed within the IBM i application using one or more pieces of key data, such as the sales order number or item code.

To assign a Label/Edit field as the Record ID within the 5250 AnyWhere Emulator frame, select the Label/Edit field with the left mouse button and then select the *Fields – Use As Part Of Window Record ID* menu item or, press the right mouse when the mouse is over the field and select *Use as Part Of Window Record ID* from the context menu. The *Edit Fields Used For Record ID* dialog will be displayed; E.g.
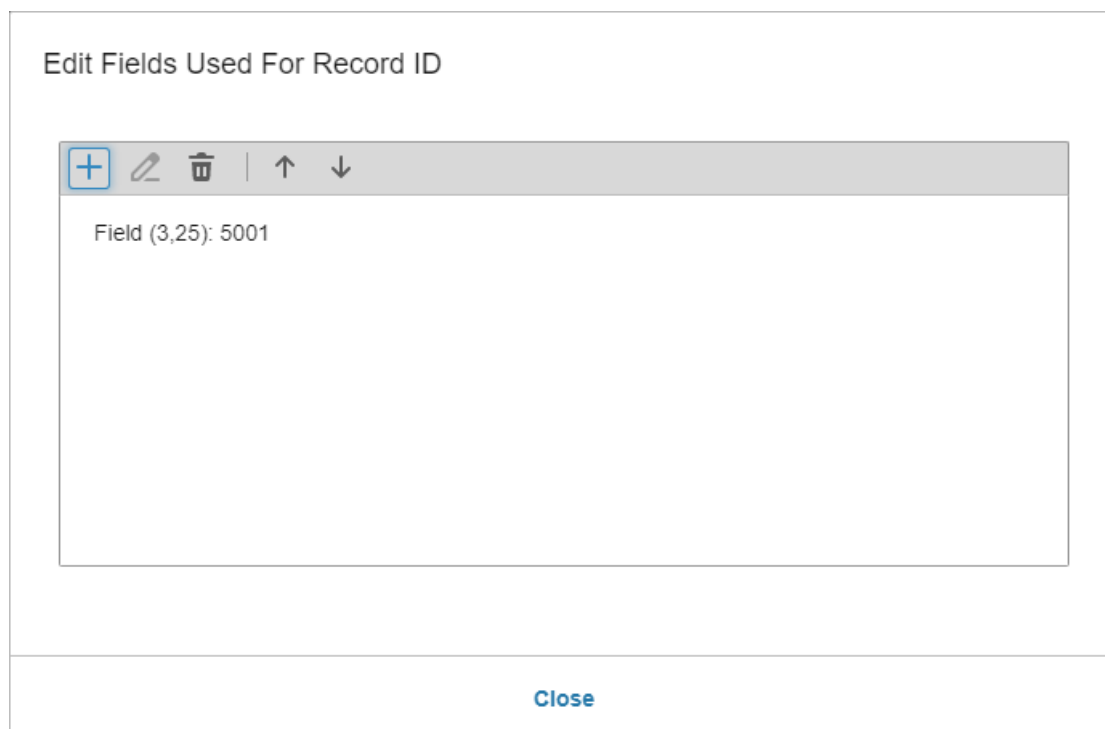
The list contains all the fields that will be used as part of the Record ID, in descending order of where they will appear (displayed from left to right within in the Record ID field).

To add another field or Designer Variable to the Record ID, select the *Add Field To List* icon ➕ . The *Select Field* dialog will appear, e.g.

Select Field

Output Field Row: 4 Column:25 (01)   ▼

Cancel   Add

Select a field or Designer Variable from the drop-down list.

Select *Add* to accept the field or Designer Variable as part of the Record ID.

Select *Cancel* to return to the *Edit Fields Used For Record ID* dialog without adding any field.

To remove an existing Record ID field, select the field or Designer Variable within the list and then select the *Remove Field From List* icon 🗑 .

To change the order of items within the list, select an item in the list and use the *Move Up* ↑ and *Move Down* ↓ icons. You can also click and hold the left mouse button on the ⋮ icon to the left of the list entry and drag it to change the field order within the list.

Select *Close* to apply the selected field(s) to the Record ID.

At design-time and run-time, the field(s) and/or Designer Variables listed in this dialog will be displayed to the left of the 5250 AnyWhere Emulator module frame beneath any Window Title fields (in white text and a smaller font); E.g.

infor	Infor System i Workspace AnyWhere	
☰	System i Home	Item/stockroom
Item / Stockroom Enquiry 5001 01		✐ Actions ▼ 💼 ▼ ⚙ ?

If this field is already being used as part of the Record ID, it will not be available in either the *Fields* or the context menu.

The *Edit Fields Used For Record ID* dialog can also be accessed via the *Fields – Edit Record ID Fields* menu option.

Show a Label/Edit Field as Part of the Tab Title

The Tab Title identifies the specific task being executed. If running several instances of the same task in Infor System I Workspace AnyWhere, for example comparing the financial information of multiple accounts, it may be useful to identify the account number on the title to help the user when switching between tabs.

To assign a Label/Edit field as the Tab Title, select the Label/Edit field with the left mouse button and then select the *Fields – Use As Part Of Tab Title* menu item or, press the right mouse when the mouse is over the field and select *Use as Part Of Tab Title* from the context menu. The *Edit Fields Used For Tab Title* dialog will be displayed, e.g.
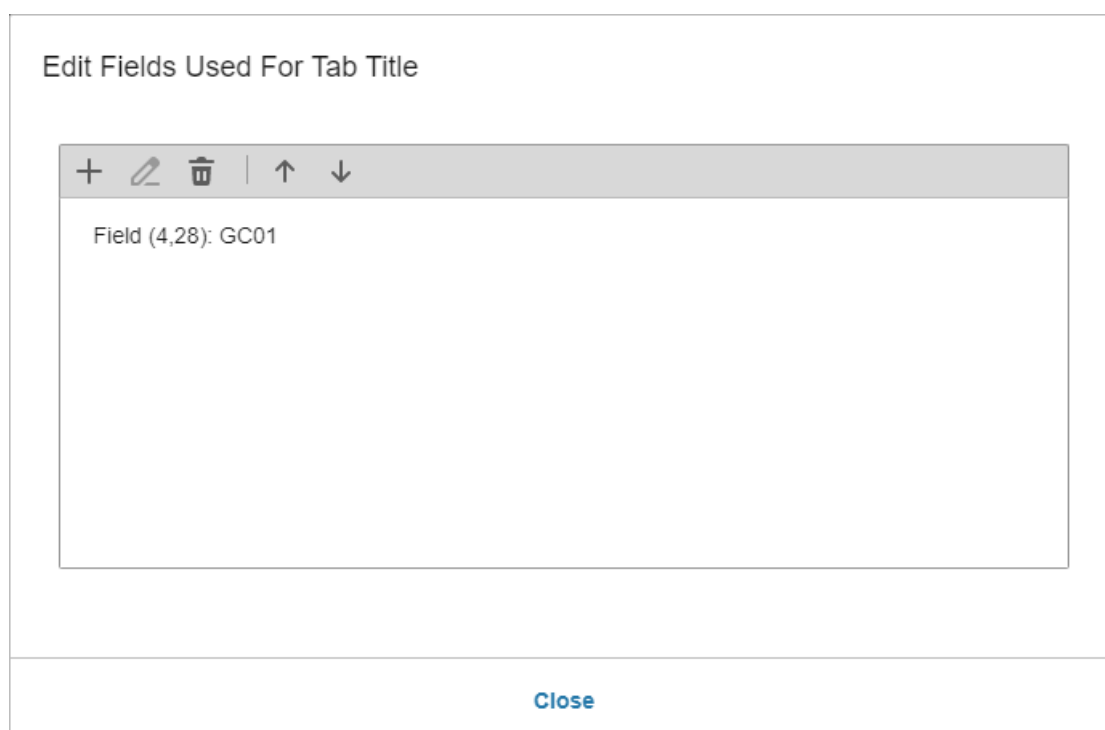
The list contains all the fields that will be used as part of the Tab Title, in descending order of where they will appear (displayed from left to right within in the current Tab's text).

To add another field or Designer Variable to the Tab Title, select the *Add Field To List* icon +. The *Select Field* dialog will appear, e.g.
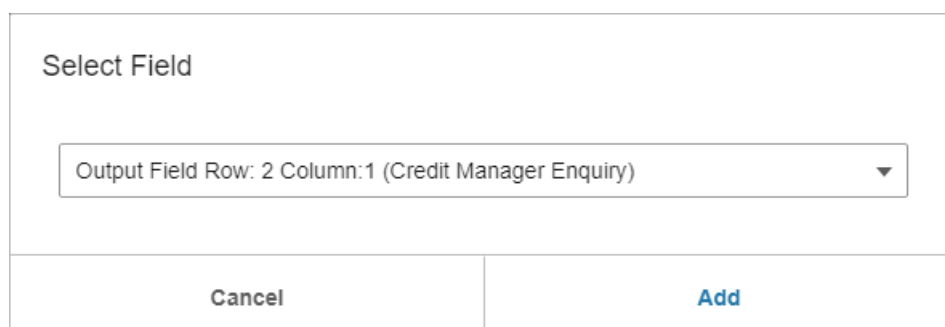
Select a field or Designer Variable from the drop-down list.

Select *Add* to accept the field or Designer Variable as part of the Record ID.

Select *Cancel* to return to the *Edit Fields Used For Tab Title* dialog without adding any field.

To remove an existing Tab Title field, select the field or Designer Variable within the list and then select the *Remove Field From List* icon 🗑 .

To change the order of items within the list, select an item in the list and use the *Move Up* ↑ and *Move Down* ↓ icons. You can also click and hold the left mouse button on the ⋮ icon to the left of the list entry and drag it to change the field order within the list.

Select Close to apply the selected field(s) to the Tab Title.

At design-time and run-time, the field(s) and/or Designer Variables listed in this dialog will be displayed in the Infor System I Workspace AnyWhere tab's title text, e.g.

|			
infor Infor System i Workspace AnyWhere			
☰	System i Home	Credit Manager Enquiry GC01	Credit Manager Enquiry GC02
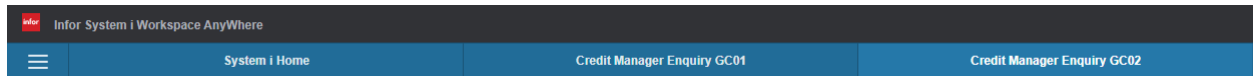
If this field is already being used as part of the Tab Title, it will not be available in either the *Fields* or the context menu.

The *Edit Fields Used For Tab Title* dialog can also be accessed via the *Fields – Edit Tab Title Fields* menu option.

Caution: Once set, the Tab Title will not be altered or updated until either another Screen Design changes it, or you exit your task and re-start a new one.

Hiding a Label, Edit or Button Field

To hide a Label or Edit field, select the field with the left mouse button and then select the *Fields – Hide Field* menu item or, press the right mouse when the mouse is over the field and select *Hide Field* from the context menu.

To hide a Button field, select the Button with the left mouse button and then select the *Buttons – Hide Button* menu item or, press the right mouse when the mouse is over the field and select *Hide Button* from the context menu.

The selected field will be immediately removed from the design-time display and will not be visible to the user at run-time.

Caution: You should be wary when hiding mandatory fields within an application screen. If the hidden field's content is empty, or invalid, it could stop the user from using the application as intended.

> **Caution:** Hiding a Button only prevents the user from clicking on that UI control. They will still be able to use the keyboard to press the corresponding Function Key. To remove **and** block the function key, use the Screen or Global Rule functionality described later within this document.

Restore a Hidden Label, Edit or Button Field

To restore a hidden field of any type, select the *Fields – Restore Hidden Fields* menu item. The *Show Hidden Fields* dialog will be displayed, e.g.

Show Hidden Fields

☐ Row: 1 Column: 1 (Order Entry)

☐ Row: 0 Column: 1 (AO002)

☐ Row: 0 Column: 19 (Z1 - UK Demo Company)

☐ Row: 0 Column: 55 (User)

☐ Row: 0 Column: 71 (29/03/21)

Close

The dialog contains a list of row/column positions of all the hidden fields (including any field text to help identification).

To make a field visible again, select the check box to the left of the field with the left mouse button within the list. The *Show* option will appear in the list header, e.g.

Show Hidden Fields

1 Selected	Show
☐ Row: 1 Column: 1 (Order Entry)	
☐ Row: 0 Column: 1 (AO002)	
☑ Row: 0 Column: 19 (Z1 - UK Demo Company)	
☐ Row: 0 Column: 55 (User)	
☐ Row: 0 Column: 71 (29/03/21)	

Close
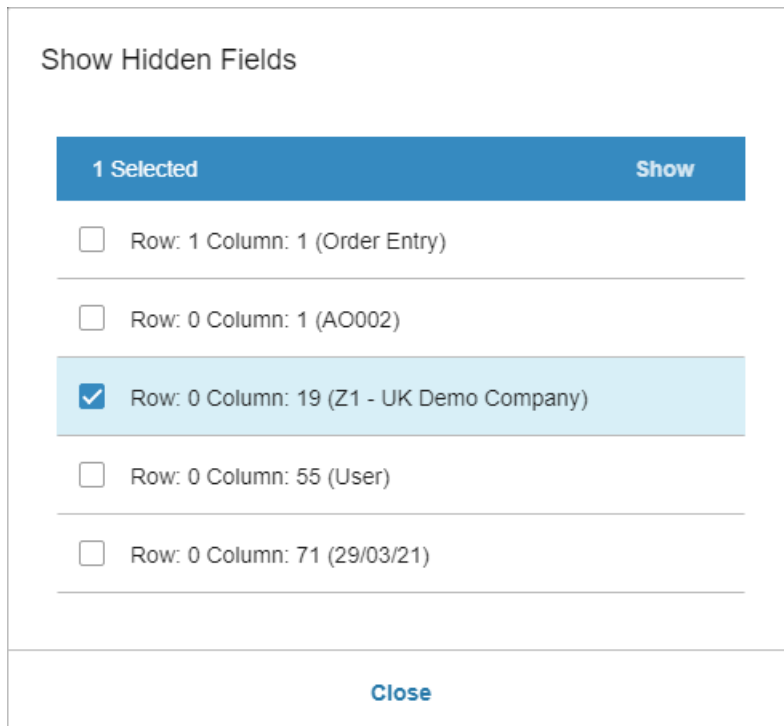
Click *Show* and the field will be made visible in the design screen and removed from the list.

You can select multiple check boxes for fields in the list before clicking *Show*. All the selected fields will be made visible in the design screen and removed from the list.

If you attempt to make a field visible that would cause an overlap with another visible field within the current screen design, you will be prompted how to proceed, e.g.

nlbavwrsank1.infor.com:9083 says

Row: 0 Column: 71

Restoring this field to its last position will cause an overlap with another field. Allow Overlap?
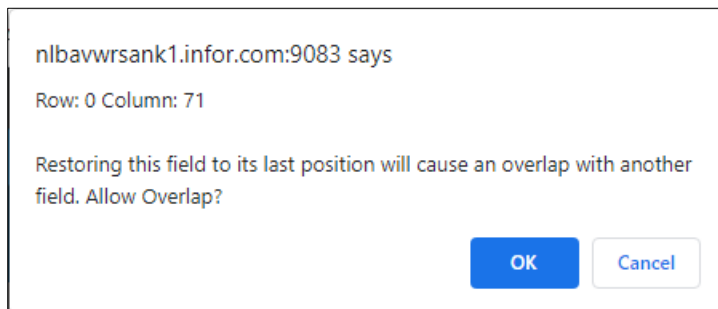
OK   Cancel

Select *OK* to show the field and accept the overlap or select *Cancel* to abort the operation.

To close the *Show Hidden Fields* dialog, select *Close*.

Add a Tooltip to a Label, Edit or Button Field

A tooltip is a piece of text that appears in a small popup window when you move the mouse over a field.

Tooltips are useful for providing extra information about an application for novice users, or where there is not enough space on the screen for a suitable field label for a description.

To add a tooltip to any Edit or Label field, select the field with the left mouse button and then select the *Fields – Add Tooltip* menu item or, press the right mouse button when the mouse is over the field and select *Add Tooltip* from the context menu.

To add a tooltip to any Button field, select the field with the left mouse button and then select the *Buttons – Add Tooltip* menu item or, press the right mouse button when the mouse is over the field and select *Add Tooltip* from the context menu.

In either case, the *Add Tooltip* dialog will display, e.g.
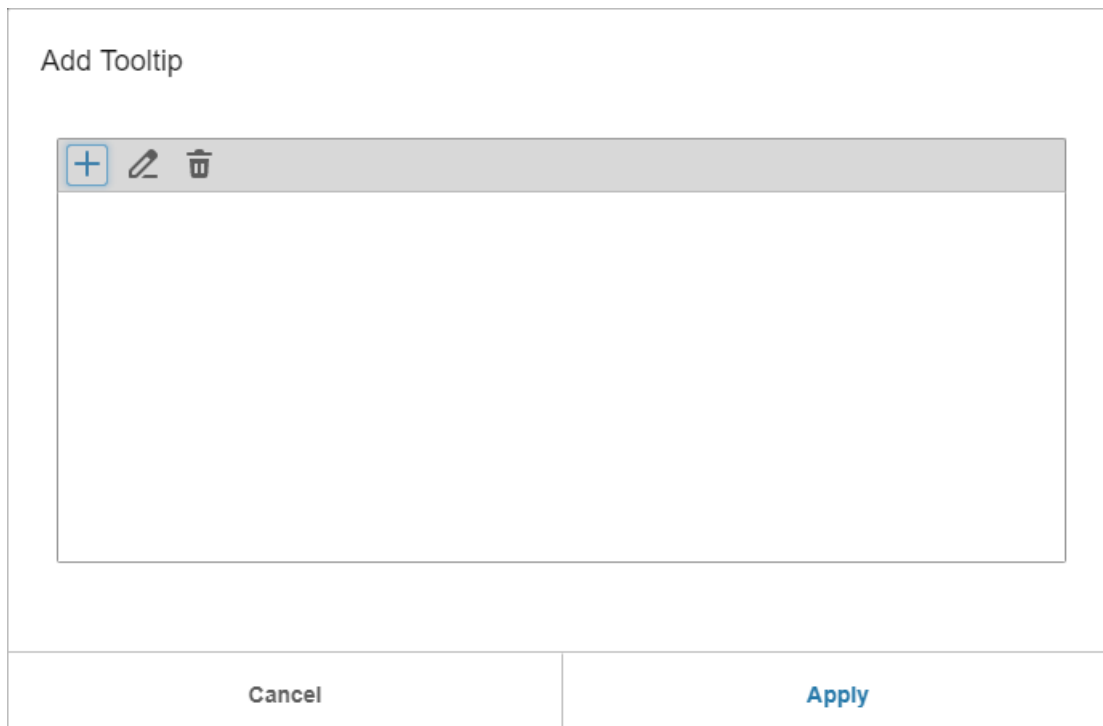
The behaviour of the *Add Tooltip* dialog is similar to that of the *Edit Field Text* dialog, so you can either create a single tooltip for all languages or have language specific tooltips.

Initially, there will be no tooltips for the selected field, and the list box in the dialog will be empty.

To add a new tooltip, click the *Add Tooltip* icon ╋. A 2nd *Add Tooltip* dialog will open, e.g.

Use the *Locale* field to select the language for this tooltip or use the **All Languages** option to apply the tooltip to the field regardless of what language the user has signed in to Infor System I Workspace AnyWhere as.

Use the *Tooltip Text* field to change the text of the field to a new tooltip value.

Click *Cancel* to close the 2nd *Add Tooltip* dialog and abort any changes.

Click *Apply* to close the 2nd *Add Tooltip* dialog and update the main *Add Tooltip* dialog list with the new tooltip entry, e.g.

You can add multiple tooltips, whether manual or from another field, for different languages, e.g.

Add Tooltip

+ ✐ 🗑

All Languages:
References for all internal orders must be pre-pended with a two-digit country code.

French:
Les références de toutes les commandes internes doivent être précédées d'un code de pays à deux chiffres.

Chinese: 所有内部订单的参考必须在前面加上两位数字的国家/地区代码。

Cancel   **Apply**

Caution: Once a tooltip has been created for a language, you will not be able to define another tooltip for the same field for that language.

To change an existing tooltip, first click on the tooltip in the list to select it, which will highlight the selected row, e.g.

Add Tooltip

+ ✎ 🗑

All Languages:
References for all internal orders must be pre-pended with a two-digit country code.

French:
Les références de toutes les commandes internes doivent être précédées d'un code de pays à deux chiffres.

Chinese:　　　　所有内部订单的参考必须在前面加上两位数字的国家/地区代码。

Cancel　　　　Apply

Once selected, to change the tooltip, click the *Edit Tooltip* icon ✎ . The *Edit Tooltip* dialog will open, e.g.

Edit Tooltip

Locale

All Languages ▾

Tooltip Text:

References for all internal orders must be pre-pended with a two-c

Cancel　　　　Apply

When editing an existing tooltip, the *Locale* field is displayed, but cannot be changed.

The behaviour of the *Tooltip Text* field and the *Cancel* and *Apply* actions is the same as in the 2nd *Add Tooltip* dialog described above.

To delete a tooltip, select the desired item within the list of tooltips in the *Add Tooltip* dialog, so that it is highlighted, and then select the *Delete Tooltip* icon 🗑 . The highlighted row will be removed from the list.

If either of the *Edit Tooltip* or *Delete Tooltip* buttons are clicked when no row in the list of tooltips in the *Add Tooltip* dialog is highlighted, then no change will be performed.
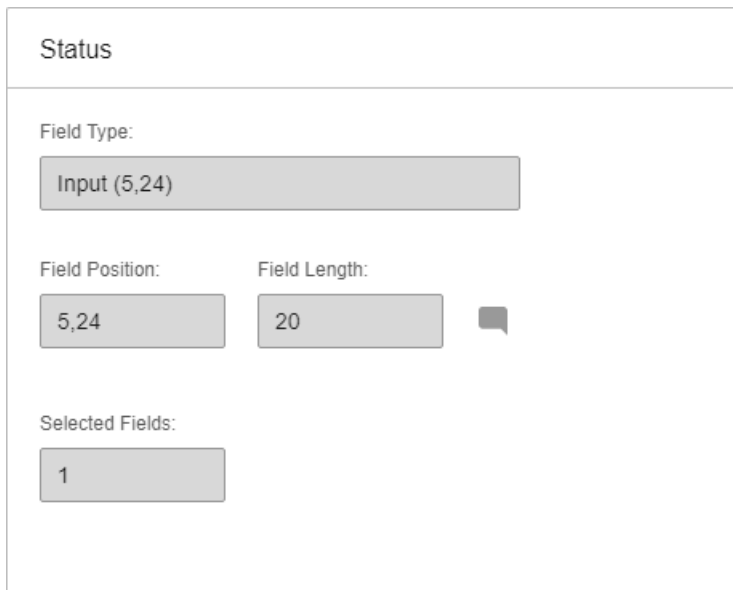
Select *Cancel* to close the *Add Tooltip* dialog without making any changes.

Select *Apply* to close the *Add Tooltip* dialog and confirm the tooltip changes.

If a tooltip has already been added to a to any Edit or Label field, select the field with the left mouse button and then select the *Fields – Edit Tooltip* menu item or, press the right mouse button when the mouse is over the field and select *Edit Tooltip* from the context menu.

If a tooltip has already been added to a to any Button field, select the field with the left mouse button and then select the *Buttons – Edit Tooltip* menu item or, press the right mouse button when the mouse is over the field and select *Edit Tooltip* from the context menu.

When a field containing a tooltip is selected, then in the Status widget, a 🗨 icon will be displayed to the right of the *Field Length* field, e.g.
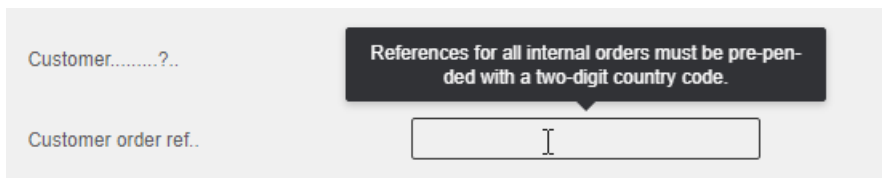
At run-time, when the mouse cursor is hovered over the field, the tooltip will be displayed dependant on the language the user has signed into Infor System I Workspace AnyWhere as, e.g.
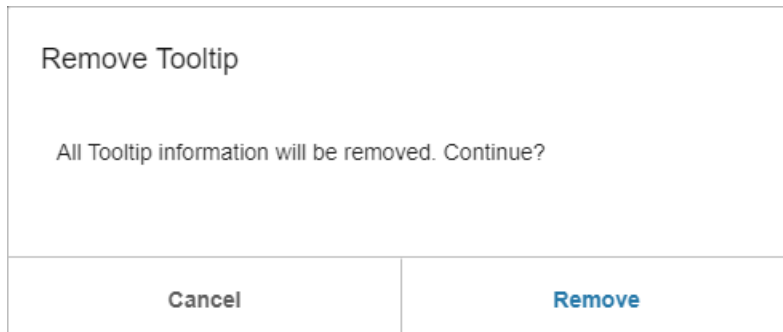
Removing a Tooltip from a Label, Edit or Button Field

To remove a tooltip from any Label or Edit field that has one defined, select the field with the left mouse button and then select the *Fields – Remove Tooltip* menu item or, press the right mouse button when the mouse is over the field and select *Remove Tooltip* from the context menu.

To remove a tooltip from any Button field that has one defined, select the field with the left mouse button and then select the *Buttons – Remove Tooltip* menu item or, press the right mouse button when the mouse is over the field and select *Remove Tooltip* from the context menu.
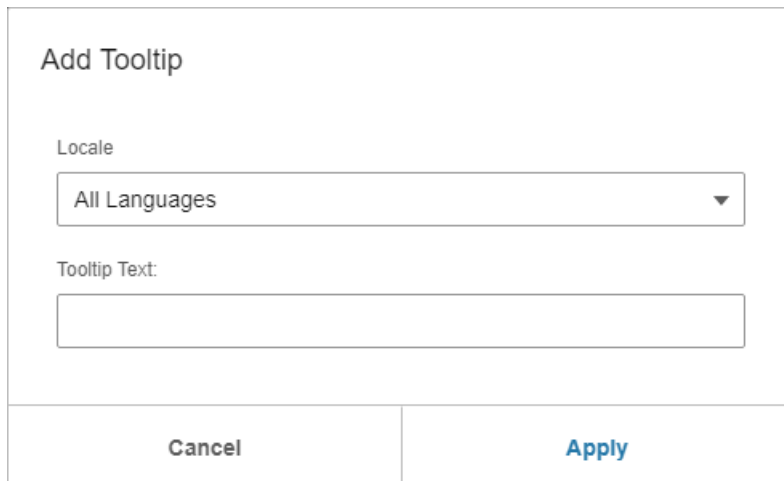
A confirmation message will be displayed, e.g.

Remove Tooltip

All Tooltip information will be removed. Continue?

| Cancel | Remove |

Select *Remove* to remove the tooltip or select *Cancel* to abort the removal.

Changing the Width of a Label or Edit Field

To alter the width of a Label or Edit field, select the field with the left mouse button and then select the *Fields – Change Width* menu item or, press the right mouse when the mouse is over the field and select *Change Width* from the context menu. The *Field Width* dialog is displayed, e.g.

Field Width

Set the Width of the Field (1 - 80).

Width

| - | 20 | + |

| Cancel | Change |

Use the *Width* field to enter a numeric value for the new width of the field. The width is expressed in grid cells. The value must be in the range shown in the description (this will change dependant on the current screen size).

Click *Change* to apply the new width to the field or *Cancel* to discard it.

> **Caution:** If you reduce the width of a Label field that changes dynamically or is altered for different languages at run-time, then the content could be clipped or become unreadable. The Font used (Proportional or Monospaced) can also affect whether data is clipped.

> **Caution:** When changing the width of an Edit field, you are only changing the field's **display** width. The field will still accept the number of characters supported by the IBM i host program.

> **Caution:** You cannot change the width of a field that has been set to be displayed as a Check Box.

Set Multiple Fields to the Same Width

If multiple fields of the same type (E.g. all selected fields are input capable types, whether they are Date, List, Prompt or Edit, or all selected fields are output-only fields) have been selected, the *Field - Make Same Width* menu option (and corresponding context menu option) will become available.
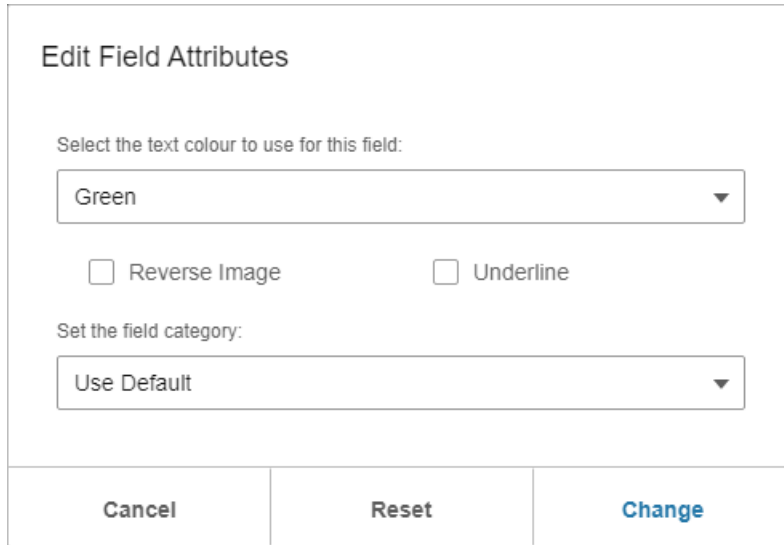
Selecting *Field - Make Same Width* will set all the selected fields to have the same width as the **first** field in the selection.

> **Caution:** This option will not be available if one or more of the selected fields has been set to be displayed as a Check Box.

> **Caution:** See notes for the *Change the Width of a Label or Edit Field* option above for restrictions that apply to this functionality.

Changing the Attributes of a Label Field

To alter the attributes of a Label field, select the Label field with the left mouse button and then select the *Fields – Edit Attributes* menu item or, press the right mouse when the mouse is over the field and select *Edit Attributes* from the context menu. The *Edit Field Attributes* dialog is displayed, e.g.

Edit Field Attributes

Select the text colour to use for this field:

Green ▼

☐ Reverse Image   ☐ Underline

Set the field category:

Use Default ▼

Cancel	Reset	Change

Use the *Select the text colour to use for this field* drop-down field to alter the text colour of the Label.

The text colours listed here translate to the colour that the Label would be displayed in on an original IBM 5495 Remote Control Unit terminal (or in a 5250 Terminal Emulator such as IBM's Client/IBM i Access). So, using the default 5250 AnyWhere Emulator colour scheme, text marked as Green will actually be displayed within the 5250 AnyWhere Emulator as a dark grey (in the default Infor System I Workspace AnyWhere light theme); text marked as White will actually be displayed within the 5250 AnyWhere Emulator as black (in the default Infor System I Workspace AnyWhere light theme). The remaining colour values will display similar colours to their name.

Here are the available colours displayed using the default colour scheme…

IBM i 5250 Green Text

IBM i 5250 White Text

IBM i 5250 Red Text

IBM i 5250 Blue Text

IBM i 5250 Pink Text

IBM i 5250 Turqoise Text

IBM i 5250 Yellow Text

IBM i 5250 Red Highlight Text
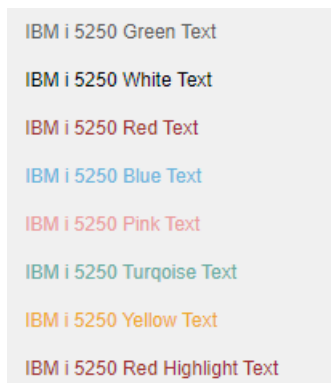
Check the *Reverse Image* checkbox field to draw the field using the reverse image style, e.g.

IBM i 5250 Green Text

IBM i 5250 White Text

IBM i 5250 Red Text

IBM i 5250 Blue Text

IBM i 5250 Pink Text

IBM i 5250 Turqoise Text

IBM i 5250 Yellow Text

IBM i 5250 Red Highlight Text
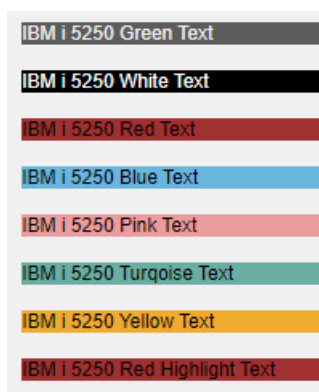
Check the *Underline* checkbox to draw a solid line beneath the field, e.g.

IBM i 5250 Green Text

IBM i 5250 White Text

IBM i 5250 Red Text

IBM i 5250 Blue Text

IBM i 5250 Pink Text

IBM i 5250 Turqoise Text

IBM i 5250 Yellow Text

IBM i 5250 Red Highlight Text
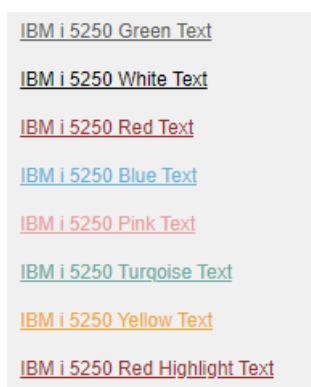
Use the *Set the field category* drop-down list to alter the style of the Label. The supported styles are…

Field Category	Behavior
Use Default	No styling is applied to the label. Used for generic Label Fields.
Field Header	Right-align the label text and add a colon to the end of the label (unless one already exists). Used for Label Fields that are positioned to the left of or above an associated Edit Field.
Read-only Input Field	Set the field background to dark grey. Used for Label Fields that contain non-numeric, application data.
Read-only Numeric Input Field	Set the field background to dark grey and right-align the label text. Used for Label Fields that contain numeric, application data.
Table Column Header	Set the field foreground to white. Used for column headers within tabular areas.

Field Category	Behavior
Table Column Header (Monospaced)	Set the field foreground to white and draw the label using the Arial Monospaced font. Used for column headers within tabular areas where multiple headings have been output using a single Label field.
Table Body (Monospaced)	Draw the label using the Arial Monospaced font. Used for content within tabular areas where multiple values have been output using a single Label Field.

Caution: The Table Column Header and Table Column Header (Monospaced) Field Categories have been maintained for backward compatibility with the System i Emulator, which did not support a functional table control within its display as the 5250 AnyWhere Emulator does.

Infor recommends that you no longer apply the Table Column Header and Table Column Header (Monospaced) Field Categories within your screen designs.

Here are examples of these attributes…
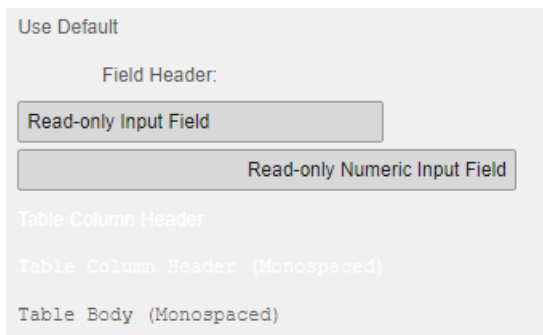
Use Default

Field Header:

Read-only Input Field

Read-only Numeric Input Field

Table Column Header

Table Column Header (Monospaced)

Table Body (Monospaced)

Select *Change* to apply the new attributes.

Select *Reset* to remove any Designer-added attributes associated with the field.

Select *Cancel* to discard any changes.

Changing the Alignment of a Label Field

To alter the alignment of a Label field, select the Label field with the left mouse button and then select the *Fields – Edit Alignment* menu item or, press the right mouse when the mouse is over the field and select *Edit Alignment* from the context menu. The *Select Alignment* dialog is displayed, e.g.

Select Alignment

Select the horizontal alignment for this field.

| Default | ▼ |

| Cancel | Change |

Use the *Select the horizontal alignment for this field* drop-down list to select the required alignment. There are four options to choose from…

Alignment	Behavior
Default	Use the default alignment for the Label field.
Left Align	Left-align the field.
Center Align	Center-align the field.
Right Align	Right-align the field.

If you have assigned a Field Category Attribute to this Label Field, the left/centre/right alignment set within this option will override any alignment associated with that Field Category.

Select *Change* to apply the new alignment.

Select *Cancel* to discard any changes.

Applying a Field Format to a Label Field

Field Formats are templates that can be applied to Label and read-only Edit fields to alter their composition. Primarily aimed at numeric and date fields, by applying a Field Format to a field you can alter its visual appearance to all users without the need for bespoke change to the RPG application.

See the *Global Field Formats* section for more information on how to create a user-defined Field Format.

To apply a Field Format to a Label or read-only Edit field, select the field with the left mouse button and then select the *Fields – Edit Field Format* menu item or, press the right mouse when the mouse is over the field and select *Edit Field Format* from the context menu. The *Select Format* dialog is displayed, e.g.

Select Format

General Number (e.g. 1234.5 becomes 1235)   ▼

| Cancel | Select |

The drop-down list contains all standard and user-defined Field Formats defined for the current Infor System I Workspace AnyWhere Profile. The standard Field Formats are…

Format Name	Description	Example
General Number	Convert field value to a number with no thousand separators.	1234.5 becomes 1235
Currency	Convert field value to a number with thousand separators, if appropriate; displays two digits to the right of the decimal separator.	1234.67 becomes £1,234.67
Fixed	Convert field value to a number with at least one digit to the left and two digits to the right of the decimal separator.	12345.678 becomes 12345.68
Standard	Convert field value to a number with thousand separators, at least one digit to the left and two digits to the right of the decimal separator.	1234567.555 becomes 1,234,567.56
Percent	Convert field value to a number multiplied by 100 with a percent sign (%) appended immediately to the right; always displays two digits to the right of the decimal separator.	0.4744 becomes 47.44%
Scientific	Convert field value to a number that uses standard scientific notation, providing two significant digits.	1234567 becomes 1.23E+06
Hex	Convert field value to a number as a string that contains the value of the number in Hexadecimal format.	127 becomes 7f
Long Date	Convert field to a date formatted according to your current web browser culture's long date format.	12 March 2008
Short Date	Convert field to a date formatted using your current web browser culture's short date format.	3/12/08

Click *Select* to accept and apply the Field Format or select *Cancel* to discard any changes made within the *Select Format* dialog.

The Field Format will not be applied to the field immediately as Field Format processing is performed within the 5250 AnyWhere Emulator Server at run-time when the screen data is generated, therefore the content of the field will be updated so all characters are changed to 'F' to indicate a Field Format has been applied. When you save your design, and exit Designer, then the Field Format will be applied at run-time.

Caution: In most cases, applying a Field Format to a field will alter its width (e.g. introducing a comma and/or decimal places). When using a proportional font, this may not have significant impact, where decorations like a comma take up a few pixels, but for displays that use monospaced fonts, where each character is of equal width, it could result in data overlapping other fields. You may need to experiment with different numeric/date values to ensure that overlapping does not occur.

Caution: Applying a Field Format will alter the display of the IBM i application within Infor System I Workspace AnyWhere only. If the IBM i application sends data to a Print (Spool) File, then any changes made to the Field Format will NOT be carried forward. Any Field Format changes made within a Designer Table Definition WILL get included if the table is exported using the Table Export functionality.

Removing a Field Format from a Label Field
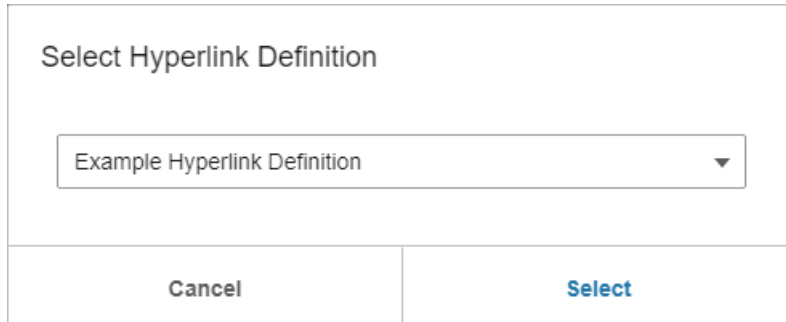
To remove a Field Format from a Label or read-only Edit field, select the field with the left mouse button and then select the *Fields – Remove Field Format* menu item or, press the right mouse when the mouse is over the field and select *Remove Field Format* from the context menu. The field will be restored to its original value/format.

Applying a Hyperlink Definition to a Label Field

A Hyperlink is a highlighted piece of text that, when clicked with the left mouse button, will either open a new tab containing a webpage or another IBM i program, or activate a JavaScript extension code.

Hyperlink Definitions are defined globally and then applied on a per-field, per-screen or global basis. See the *Global Hyperlink Definitions* section for more information on how to create user-defined Hyperlink Definitions.

To apply a Hyperlink Definition to a Label or read-only Edit field, select the field with the left mouse button and then select the *Fields – Edit Hyperlink Definition* menu item or, press the right mouse when the mouse is over the field and select *Edit Hyperlink Definition* from the context menu. The *Select Hyperlink Definition* dialog is displayed, e.g.
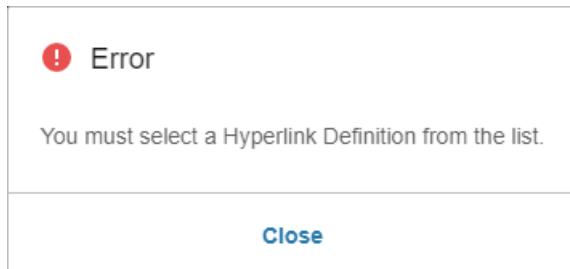
Select Hyperlink Definition

Example Hyperlink Definition ▼

Cancel	Select

The drop-down list contains all the Hyperlink Definitions defined for the current Infor System I Workspace AnyWhere Profile.

Click *Select* to accept and apply the Hyperlink Definition or select *Cancel* to discard any changes made within the *Select Hyperlink Definition* dialog.

If you click *Select* and you have not selected a Hyperlink, you will see the following error message…

❗ Error

You must select a Hyperlink Definition from the list.

Close

Select *Close* to close the error message and either select an entry from the *drop-down list* or select the *Cancel* option to discard the Hyperlink Definition selection.

Removing a Hyperlink Definition from a Label Field

To remove a Hyperlink Definition from a Label or read-only Edit field, select the field with the left mouse button and then select the *Fields – Remove Hyperlink Definition* menu item or, press the right mouse when the mouse is over the field and select *Remove Hyperlink Definition* from the context menu. The field will be restored to its original style.

Apply Prompt Button Style to an Edit Field

Adding the Prompt Button style to an Edit field will append a button to the right of the field that can be pressed to request further information (E.g. search for an item code).

Caution: The IBM i program field that you apply this button must support prompting for this function to correctly.

To add a Prompt Button to an Edit field, select the Edit field with the left mouse button and then select the *Fields – Show as Prompt Field* menu item or, press the right mouse when the mouse is over the field and select *Show as Prompt Field* from the context menu. The *Prompt Button Properties* dialog is shown, e.g.

The *Prompt Key* field tells the Designer which key combination to auto-press when the prompt button is activated at run-time. In most IBM i applications, this will be **F4** but in some applications this will be **Enter** or **Tab then Enter**.

The *Prompt Value* tells the Designer what value to put into the field when the prompt is activated at run-time. In most IBM i applications, this will be a **Question Mark,** but in some applications, this can be set to **None**.

Select *Change* to apply the Prompt Button or *Cancel* to discard it.

The Prompt Button is shown next to the Edit field, e.g.
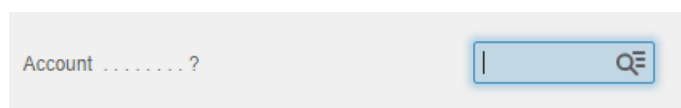
The Prompt Button will always appear to the right-hand side of the Edit field. If you move the field, within Designer, the Prompt Button will move along with it.

The Prompt Button will cause the width of the field to expand by approximately one cell width. This could cause an overlap with any proceeding fields.

If you wish to change the properties of an existing Prompt Button, select the Edit field with the left mouse button and then select the *Fields – Prompt Properties* menu item or, press the right mouse when the mouse is over the Edit field and select *Prompt Properties* from the context menu. The *Prompt Button Properties* dialog is shown as explained above.

Remove Prompt Button Style from an Edit Field

To remove a Prompt Button field, select the Edit field with the left mouse button and then select the *Fields – Remove Prompt* menu item or, press the right mouse when the mouse is over the field and select Remove *Prompt* from the context menu. The Prompt Button icon will be removed from the Edit field.

Apply Date Button Style to an Edit Field

Adding the Date Button style to an Edit field gives the user access at run-time to a GUI Date Picker control that allows them to select a date using a familiar calendar style layout used in many Infor and Microsoft Windows applications.

To add a Date Button to an Edit field, select the Edit field with the left mouse button and then select the *Fields – Show as Date Field* menu item or, press the right mouse when the mouse is over the field and select *Show as Date Field* from the context menu. The *Edit Date Formats* dialog is shown, e.g.

Edit Date Formats

+ ✐ 🗑

Cancel	Apply
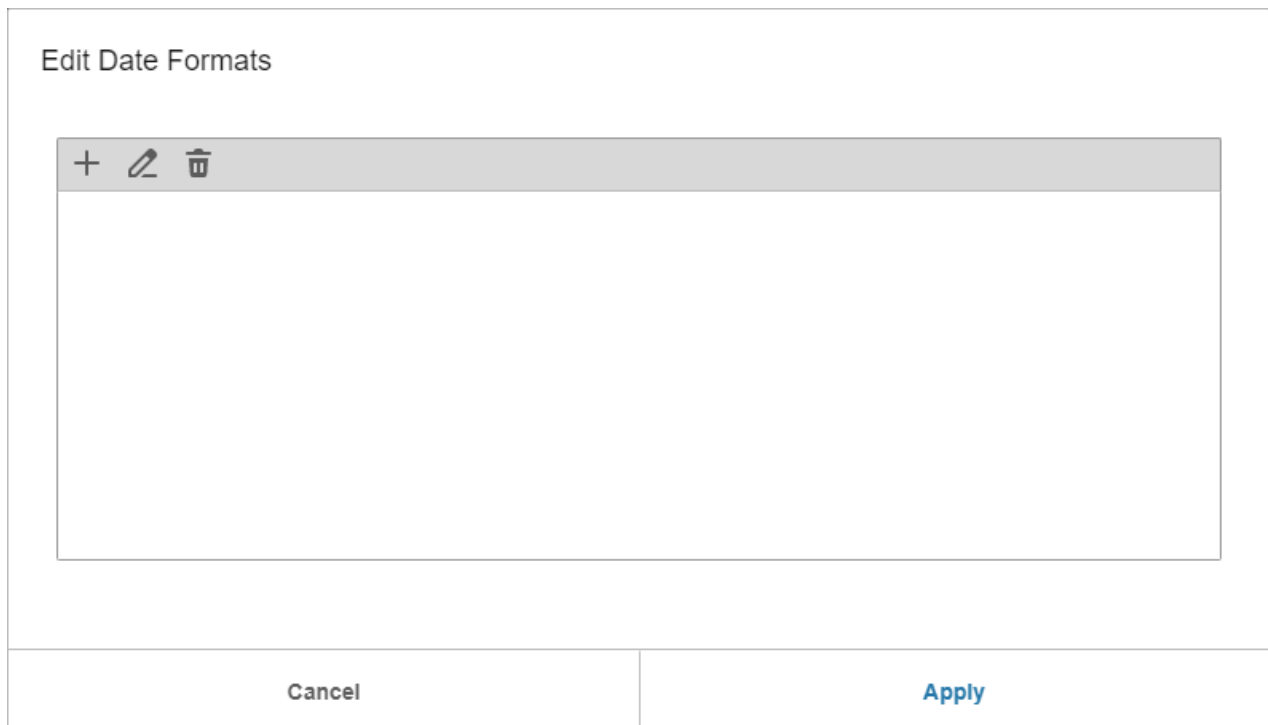
Initially, there will be no date formats for the selected Edit field, and the list box will be empty.

To add a new date format, click the *Add Date Conversion Format* icon ✛. The *Add Date Conversion Format* dialog will open, e.g.

Add Date Conversion Format

Locale

All Languages ▼

Date Input Formats:

System Manager Locale (with or without separators) ▼

Date Output Format:

System Manager Locale (without separators) ▼

Cancel   **Apply**

For a Date field, for the selected locale, you need to tell the Designer the format(s) of the date that will be passed into the Date Picker control (Date Input Formats) and the format of the date that the Date Picker will write back to the Edit field when the user selects a valid date (Date Output Format).

Use the *Locale* field to select the user's run-time language that will apply this date format or use the **All Languages** option to apply the date format to the field regardless of what language the user has signed in to Infor System I Workspace AnyWhere as.

You can select the date input format for the selected locale from a set of pre-defined *Date Input Formats* from a drop-down list. Only a single *Date Input Format* can be specified per locale.

Within the *Date Input Formats* drop-down list, date formats are constructed by using combinations of the characters D (for Day), M (for Month) and Y (for Year) with or without separator characters.

For example, the Edit field may contain the text 01/12/09 where 01 is day, 12 is the month and 09 is the year. To pass this correctly to the Date Picker, you would set the *Date Input Formats* field to **DD/MM/YY** from the drop-down list.

Some Edit fields support multiple input date formats. For example, the Edit field may contain the text 01/12/09 or 011209. To pass this correctly to the Date Picker, you would set the *Date Input Formats* field to **DD/MM/YY;DDMMYY** from the drop-down list.

As well as the various combinations of D, M and Y there are six special values which use the System Manager date format (three for 2-digit year and three for 4 digit year dates) and three special values which use the current "short-date" format from the Microsoft Windows Regional & Language Settings (also known as the Windows Locale).

If you select one of the three *System Manager Locale* values then, at run-time, the content of the Edit field will be converted to a date using the current Infor System I Workspace AnyWhere User's System Manager Date format. If the user's date format is D, then the conversion format will be DDMMYY (or DD/MM/YY with separators); if the user's date format is M, then the conversion format will be MMDDYY (or MM/DD/YY with separators); if the user's date format is Y, then the conversion format will be YYMMDD (or YY/MM/DD with separators).

If you select one of the three *Windows Locale* values then, at run-time, the content of the Edit field will be converted to a date using the current users Microsoft Windows Locale setting.

If you select one of the three *System Manager Locale using 4-Digit Year* values then, at run-time, the content of the Edit field will be converted to a date with a full 4-Digit Year (e.g. 01/01/2020 instead of 01/01/20 for 1st January 2020) using the current Infor System I Workspace AnyWhere User's System Manager Date format. If the user's date format is D, then the conversion format will be DDMMYYYY (or DD/MM/YYYY with separators); if the user's date format is M, then the conversion format will be MMDDYYYY (or MM/DD/YYYY with separators); if the user's date format is Y, then the conversion format will be YYYYMMDD (or YYYY/MM/DD with separators).

> **Caution:** Unless you wish to use a hard-coded date input format for a specific locale, Infor recommends that you use one of the System Manager Locale date input formats with the **All Languages** locale, which should cover the majority of user configurations and locales.

Within the *Date Output Format* drop-down list, date formats are constructed by using combinations of the characters D (for Day), M (for Month) and Y (for Year). Only a single *Date Output Format* can be specified per locale.

For example, the Edit field may support the manual input of dates as DDMMYY. You would select this from the drop-down list as the format for the output date. At run-time, if the user selected the date of 10th November 2009 within the Date Picker control, this would be converted using the *Date Output Format* setting and the text of the Edit field sent back to the IBM i application would be automatically set to 101109.

> **Caution:** If you select a *Date Output Format* that is longer than the length of the associated Edit field, then any extra characters will be truncated. This will lead to an invalid date appearing within the Edit field at run-time.
>
> E.g. were you to select the DDMMYYYY *Date Output Format* for a six-character Edit field, then selecting the date 28th September 2009 in the Date Picker control would populate the Edit field with 280920, not the correct date value 280909.

> **Caution:** Unless you wish to use a hard-coded date output format for a specific locale, Infor recommends that you use one of the System Manager Locale date output formats with the **All Languages** locale, which should cover the majority of user configurations and locales.

Click *Cancel* to close the *Add Date Conversion Format* dialog and abort any changes.

Click *Apply* to close the *Add Date Conversion Format* dialog and update the *Edit Date Formats* dialog with the new date format (showing both the locale and the input and output formats selected); e.g.

Edit Date Formats

＋　✎　🗑

All Languages:　Input: System Manager Locale (with or without separators)
　　　　　　　　　Output: System Manager Locale (without separators)

Cancel　　　　　　　　　　　　　**Apply**

You can add multiple date formats, for different languages, e.g.

Edit Date Formats

＋　✎　🗑

All Languages:　Input: System Manager Locale (with or without separators)
　　　　　　　　　Output: System Manager Locale (without separators)

German:　　　　Input: MM/DD/YY
　　　　　　　　　Output: MMDDYY

Cancel　　　　　　　　　　　　　**Apply**

Caution: Once a date format has been created for a language, you will not be able to define another date format for the same field for that language.

To change an existing date format, first click on the date format in the list to select it, which will highlight the selected row, e.g.

Edit Date Formats

+ ✎ 🗑

| All Languages: | Input: System Manager Locale (with or without separators)
Output: System Manager Locale (without separators) |
| German: | **Input: MM/DD/YY**
Output: MMDDYY |

Cancel | Apply

Once selected, to change the date format, click the *Edit Date Conversion Format* icon ✎ . The *Edit Date Conversion Format* dialog will open, e.g.

Edit Date Conversion Format

Locale

German ▾

Date Input Formats:

MM/DD/YY ▾

Date Output Format:

MMDDYY ▾

Cancel	Apply

When editing an existing date format, the *Locale* field is displayed, but cannot be changed.

The behaviour of the *Date Input Formats* and *Date Output Format* fields and the *Cancel* and *Apply* actions is the same as in the *Add Date Conversion Format* dialog described above.

To delete a date format, select the date format within the *Edit Date Formats* dialog's list, so that it is highlighted, and then select the *Delete Date Conversion Format* icon 🗑 . The highlighted row will be removed from the list.

If either of the *Edit Date Conversion Format* or *Delete Date Conversion Format* buttons are clicked when no row in the *Edit Date Formats* dialog's list of date formats is highlighted, then no change will be performed.

Select *Cancel* to close the *Edit Date Formats* dialog without making any changes to the Edit field.

Select *Apply* to close the *Edit Date Formats* dialog and confirm the date format changes.

When you select *Apply* in the *Edit Date Formats* dialog, you will see a Date Prompt Button appear to the right-side of the Edit field, e.g.

From date......... | 00/00/00 📅

At run-time, pressing the Date Prompt Button will show the Date Picker control, e.g.
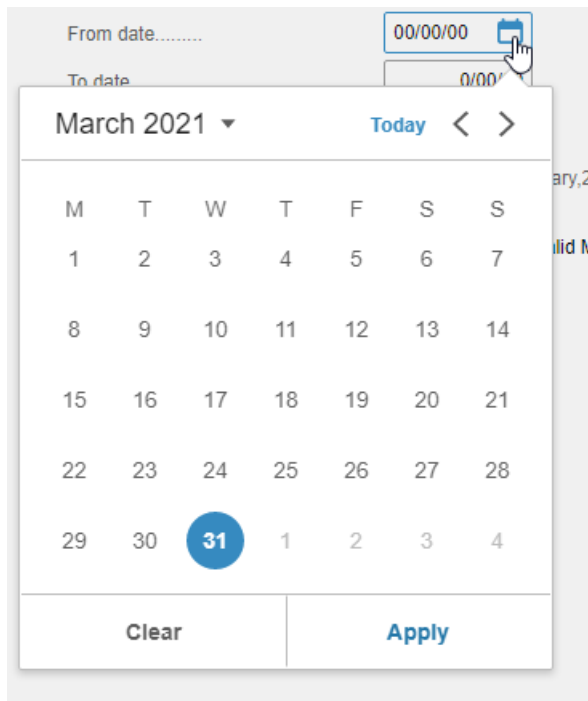
For more information on using the Date Picker control, see the Infor System I Workspace AnyWhere Product guide.

The Date Prompt Button will always appear to the right-hand side of the Edit field. If you move the field, within Designer, the Date Prompt Button will move along with it.

The Date Prompt Button will cause the width of the field to expand by approximately one cell width. This could cause an overlap with any proceeding fields.

To change the properties of an existing Date field, select the Edit field with the left mouse button and then select the *Fields – Date Properties* menu item or, press the right mouse when the mouse is over the field and select *Date Properties* from the context menu. The *Edit Date Formats* dialog is shown.

Remove Date Button Style from an Edit Field

To remove a Date field, select the Edit field with the left mouse button and then select the *Fields – Remove Date* menu item or, press the right mouse when the mouse is over the field and select *Remove Date* from the context menu. The Date Button icon will be removed from the Edit field.

Apply Check Box Style to an Edit Field

A check box can be used where an IBM i program Edit field only accepts two values (by default, 1 or 0). The field is drawn as a box. When the value of the field is 0, empty or blank, the box is empty ☐ (unchecked). When the value of the field is 1, a tick mark appears in the box ☑ (checked). This style of field is used in many Infor and Microsoft Windows applications.

> **Caution:** See the *Edit Check Box Values* section for instruction on how to change the default checked and unchecked values.

To change an Edit field to a check box, select the Edit field with the left mouse button and then select the *Fields – Show as Check Box* menu item or, press the right mouse when the mouse is over the field and select *Show as Check Box* from the context menu. The field will be converted to the check box style, e.g.

The *Show as Check Box* menu option will only be available if the Edit field width is exactly one character wide.

> **Caution:** The check box style should only be applied to IBM i program fields that accept "on/off" values (e.g. a field value of 1 means the associated application setting is "on", and a field value of 0 means the associated application setting is "off"). Applying this design style to a field that accepts other values will make those other values inaccessible at run-time.

Apply Check Box Style to a Label or Read-Only Edit Field

A check box can be used on any single-character IBM i program Label or Read-Only Edit field. The field is drawn as a box with a read-only style. When the value of the field is 0, empty or blank (space), the box is empty ☐ (unchecked). When the value of the field is anything else, a tick mark appears in the box ☑ (checked).

> **Caution:** See the *Edit Check Box Values* section for instruction on how to change the default checked and unchecked values.

To change a Read-Only Edit Field or Label field to a check box, select the field with the left mouse button and then select the *Fields – Show as Check Box* menu item or, press the right mouse when the mouse is over the field and select *Show as Check Box* from the context menu. The field will be converted to the check box style, e.g.

| Saleable item .... | ☑ |
| Packaging reporting item . | ☐ |

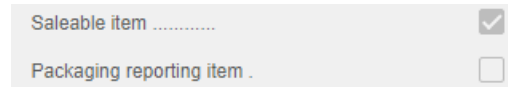The *Show as Check Box* menu option will only be available if the field width is exactly one character wide.

Apply Show Check Box If Field Is Missing to a Check Box

If the Check Box style is applied to a field, an additional option *Show Check Box When Field Is Missing* will be available on the Field and Context menus. When this is selected, then, at run-time, if the field is not displayed, an unchecked, read-only Check Box will be displayed at the field's position.

If the option *Show Check Box When Field Is Missing* has been applied to a field, the *Hide Check Box When Field Is Missing* menu item will be displayed on the Field Menu and Context Menu instead.

Remove Show Check Box If Field Is Missing from a Check Box

To remove the *Show Check Box When Field Is Missing* option select the Check Box field with the left mouse button and then select the *Fields – Hide Check Box When Field Is Missing* menu item or, press the right mouse when the mouse is over the field and select *Hide Check Box When Field Is Missing* from the context menu.

Edit Check Box Values

To change the default check box input recognition or output values of 1 (checked) and 0 (unchecked), select the check box field with the left mouse button and then select the *Fields – Edit Check Box Values* menu item or, press the right mouse when the mouse is over the check box field and select *Edit Check Box Values* from the context menu. The *Edit Check Box Values* dialog is displayed, e.g.

The *Checked Value* and *Unchecked Value* fields only accept a single alphanumeric, asterisk or space character.

Select *Change* to apply the new check box values.

Select *Reset* to remove any existing check box value overrides.

Select *Cancel* to discard any changes.

If you select *Change* and the *Checked Value* field contains no value, the following error message will be displayed.

Click *Close* to dismiss the error message.

A similar error message will be displayed if the *Unchecked Value* fields contains no value.

Caution: You can select multiple check box fields, and then use *Edit Check Box Values* menu option, from either the *Fields* menu or Context Menu, to change or reset the check box values for all the selected fields.

Caution: The check box values of both editable and read-only Edit fields, and Labels, may be changed.

Remove Check Box Style from a Field

To remove the check box style, select the field with the left mouse button and then select the *Fields – Remove Check Box* menu item or, press the right mouse when the mouse is over the field and select *Remove Check Box* from the context menu. The field will be restored to its original style and any check box attributes applied to the field (such as Show Check Box If Field Is Missing, Check Box Values) will also be removed.
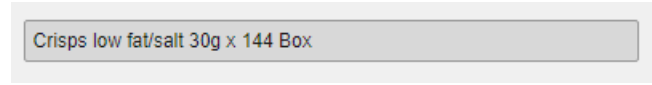
Apply Read-Only Style to an Edit Field

The Read-Only style prevents the user from entering data into an Edit field at run-time.

To make an Edit field read-only, select the Edit field with the left mouse button and then select the *Fields – Read-Only* menu item or, press the right mouse when the mouse is over the field and select *Read Only* from the context menu.

This changes the field to the read-only edit field style.

At run-time, a read-only Edit field will be displayed using the read-only Edit field style, e.g.

Crisps low fat/salt 30g x 144 Box

When an Edit field is set as read-only, any text sent from the host application will still be shown and you can still assign text to it within Designer, e.g. you could assign a value to the field and prevent the user from changing it.

> **Caution:** You should be cautious when making mandatory fields read-only within a IBM i application screen. If the read-only field's content is empty, or invalid, it could stop the user from using the application as intended.

Remove Read-Only Style from an Edit Field

To make an Edit field editable again, select the Edit field with the left mouse button and then select the *Fields – Remove Read-Only* menu item or, press the right mouse when the mouse is over the field and select the *Remove Read Only* menu item from the context menu.

The Edit field will now be displayed using the editable field style.

Apply the Required Field Style to an Edit Field

The Required Field style applies an icon to the Label field closest to the left of the Edit field to give the user an indication that the field must be populated before the IBM i application can continue.

> **Caution:** The Required Field Style adds no additional logic or validation processing to the field. It is purely a visual indication to users for identifying mandatory fields. To add validation logic to a field, see the Define Custom Screen Validation section later in this guide.

To apply the Required Field style to an Edit field, select the Edit field with the left mouse button and then select the *Fields – Required Field* menu item or, press the right mouse when the mouse is over the field and select *Required Field* from the context menu.

This changes the Label field closest to the left of the Edit field to use the Required Field style, e.g.

Weight .... *   115.0000
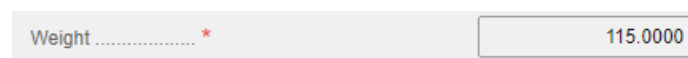
Remove the Required Field Style from an Edit Field

To remove the Required Field style from an Edit field, select the Edit field with the left mouse button and then select the *Fields – Remove Required Field* menu item or, press the right mouse when the mouse is over the field and select the *Remove Required Field* menu item from the context menu.

This removes the indicator from the Label field closest to the left of the Edit field.

Changing the Attributes of an Edit Field

To alter the attributes of an Edit field, select the Edit field with the left mouse button and then select the *Fields – Edit Attributes* menu item or, press the right mouse when the mouse is over the field and select *Edit Attributes* from the context menu. The *Edit Field Attributes* dialog is displayed, e.g.

Use the *Select the text colour to use for this field* drop-down list to alter the text colour of the Edit field.

The text colours listed here translate to the colour that the Edit field would be displayed in on an original IBM 5495 Remote Control Unit terminal (or in a 5250 Terminal Emulator such as IBM's Client/IBM i Access). So, using the default 5250 AnyWhere Emulator colour scheme, text marked as Green or White will actually be displayed within the 5250 AnyWhere Emulator as black text. The remaining colour values will display similar colours to their name.

Here are the available colours displayed using the default colour scheme…

Check the *Reverse Image* checkbox to draw the field using the reverse image style, e.g.

Select *Change* to apply the new attributes.

Select *Reset* to remove any Designer added attributes associated with the field.

Select *Cancel* to discard any changes.

Changing the Alignment of an Edit Field

Caution: If the Edit field is only one character wide, this option will not be available in the Fields menu or the context menu.
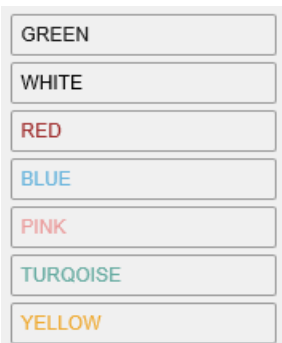
To alter the alignment of an Edit field, select the Edit field with the left mouse button and then select the *Fields – Edit Alignment* menu item or, press the right mouse when the mouse is over the field and select *Edit Alignment* from the context menu. The *Select Alignment* dialog is displayed, e.g.
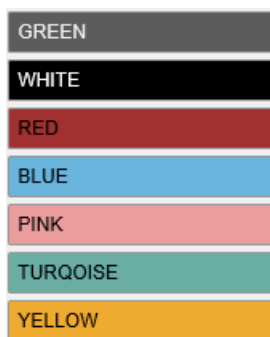
Select Alignment

Select the horizontal alignment for this field.

Default ▼

Cancel | Change

Use the *Select the horizontal alignment for this field* drop-down list to select the required alignment. There are four options to choose from…

Alignment	Behavior
Default	Use the default alignment for the Edit field.
Left Align	Left-align the field.
Center Align	Center-align the field.
Right Align	Right-align the field.

If the Edit Field is numeric, and normally automatically right aligned, the left/centre/right alignment set within this option will override the default alignment.

Select *Change* to apply the new alignment.

Select *Reset* to remove any Designer added alignment associated with the field.

Select *Cancel* to discard any changes.

Add a Label Field

You can add additional Label fields to your IBM i application screens to provide extra information that is specific to your business.

To add a Label field, select the *Fields – Add Field* menu item. The *Add Field* dialog is shown; E.g.

Add Field

+ ✎ 🗑
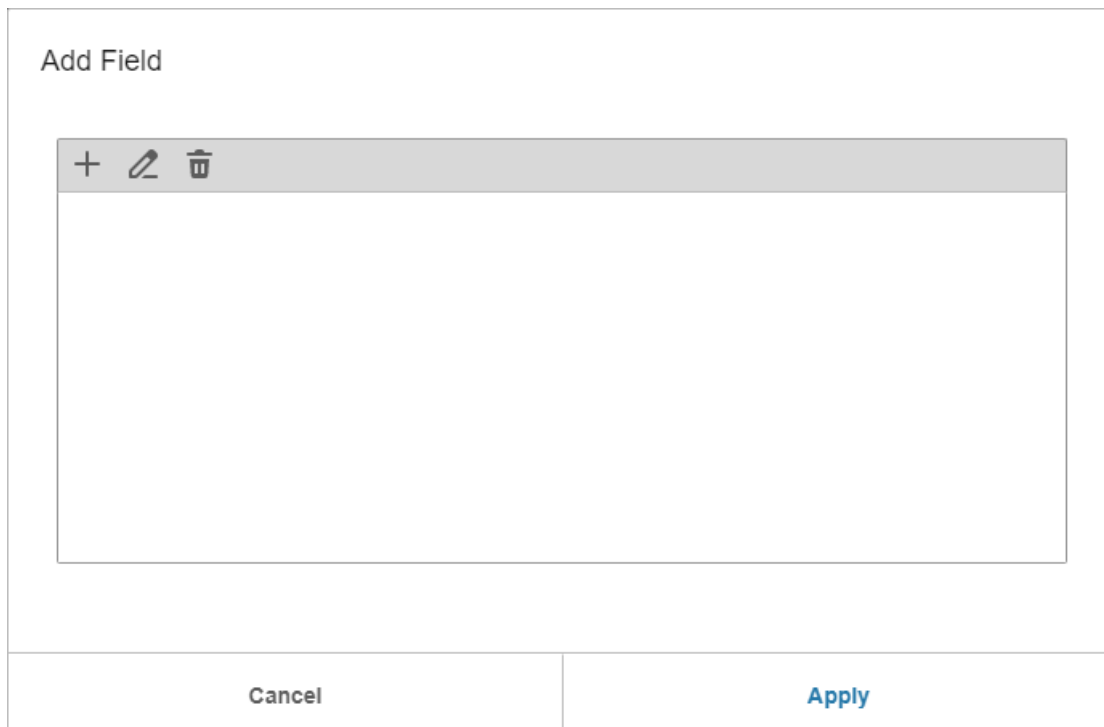
Cancel	Apply

Assign the Field a label as you would for any other Edit or Label text override (see *the Changing Label/Edit Field Text* section for more details). Select *Apply* to add the Field or *Cancel* to discard it.

The label will be placed within the screen at the first free location where the content will fit. If there is no location free to fit the label, it will be positioned at the first free location, which could cause overlap with another field.

Once the new Label field has been created, you can use the mouse to drag and move it to a new position like any other field.

The Attributes, Width and Alignment of the new Label field can be adjusted.

If you wish to change the Label, select the Label field with the left mouse button and then select the *Fields – Edit Text* menu item or, press the right mouse when the mouse is over the field and select *Edit Text* from the context menu. The *Edit Field Text* dialog is shown.

You can use any Label created in Designer as part of the Window Title, Record Id or Tab Title.

You can hide any Label created in Designer and use it as part of parameters to Custom Buttons added to the page.

You can add a tooltip to any Label created in Designer or apply a Hyperlink or Field Format to it.

Remove a Label Field

If you wish to remove a Label added using Designer, select the Label field with the left mouse button and then select the Fields – *Remove Field* menu item or, press the right mouse when the mouse is over the field and select *Remove Field* from the context menu. You will be prompted to confirm the action, e.g.

Remove Field

All field information will be removed. Continue?

Cancel	Remove

Select *Remove* to remove the Label or *Cancel* to keep it.

Add a Group Box
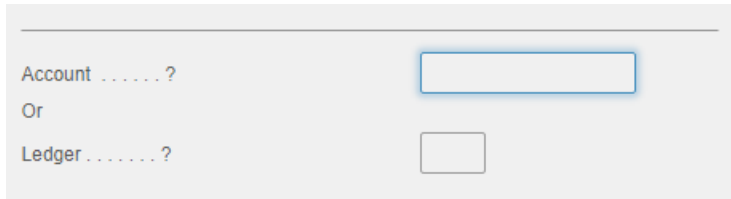
You can select areas of your IBM i application screens to segregate common data sets within the display (known in Designer as a Group Box). The selected area will contain a Title Bar at the top that may contain user-defined or field text, e.g.

Group Box with Title Bar and text …

Account Code Enquiry

Account . . . . . . ?

Or

Ledger . . . . ?

Group Box with Title Bar, but no text …

To add a Group Box field, select the *Fields – Define a Group Box* menu item. This will put Designer into *Define Group Box Mode.* In this mode, you can use the mouse to draw a rectangular area that encapsulates the Group Box. No other Designer functions will operate whilst in this mode.

If you wish to abort the *Define Group Box Mode*, select *Fields – Cancel Group Box Definition* or, press the right mouse button and select *Cancel Group Box Definition* from the context menu.

To define the rectangular area of the Group Box, press and hold the left mouse button within the application screen, and move the mouse. You will see a "rubber-band" rectangle that will track the mouse pointer, e.g.
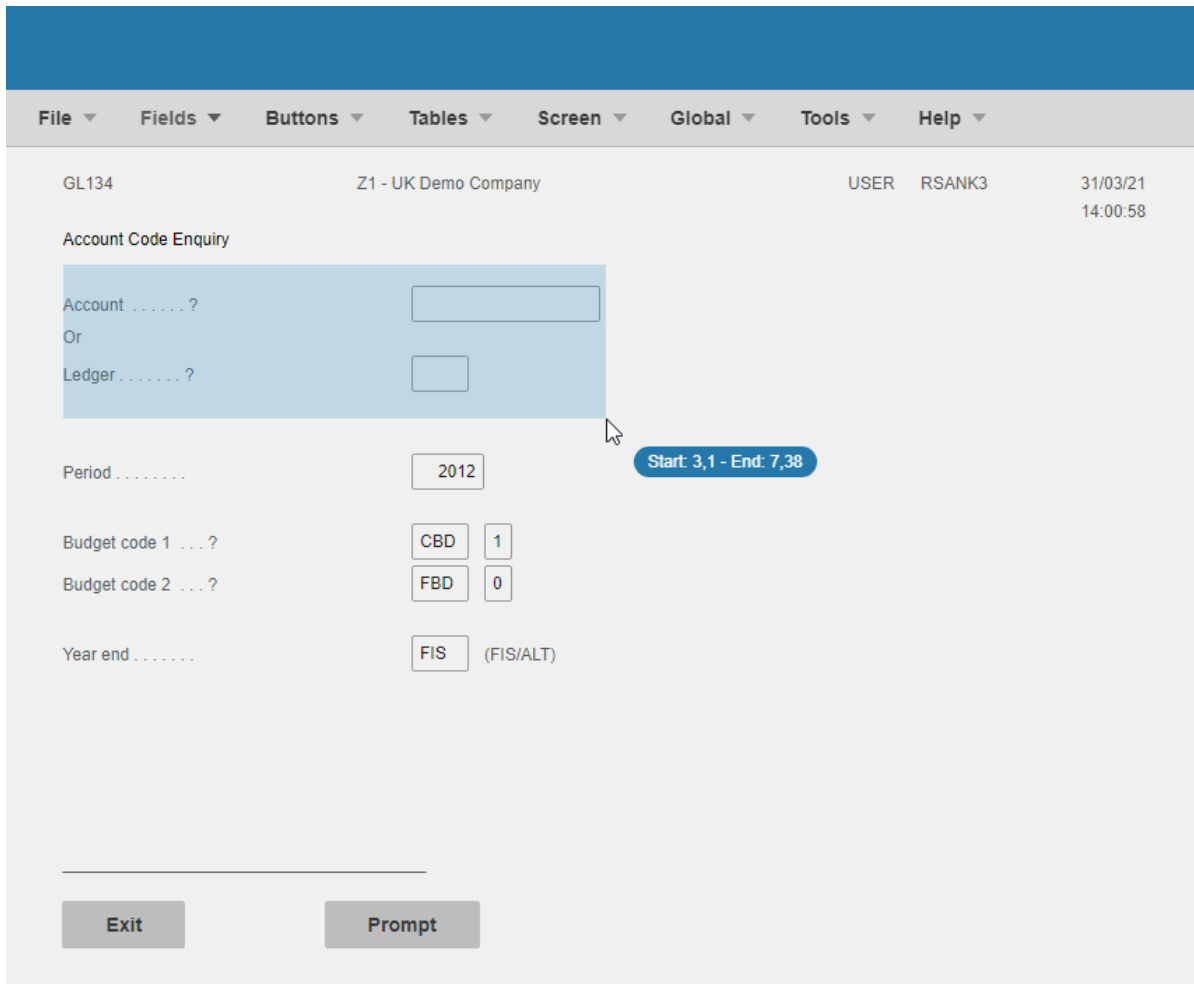
As you move the mouse, a badge control is placed next to the mouse cursor showing the cell row and column that the mouse button was first pressed in (labelled Start), and the cell row and column that the bottom-right corner of the rubber-band area is currently on (labelled End).

When you have sized the rectangle to the area you require, release the left mouse button. The *Edit Group Box Title* dialog will be displayed, e.g.

Edit Group Box Title

+ ⌀ 🗑

Cancel	Apply
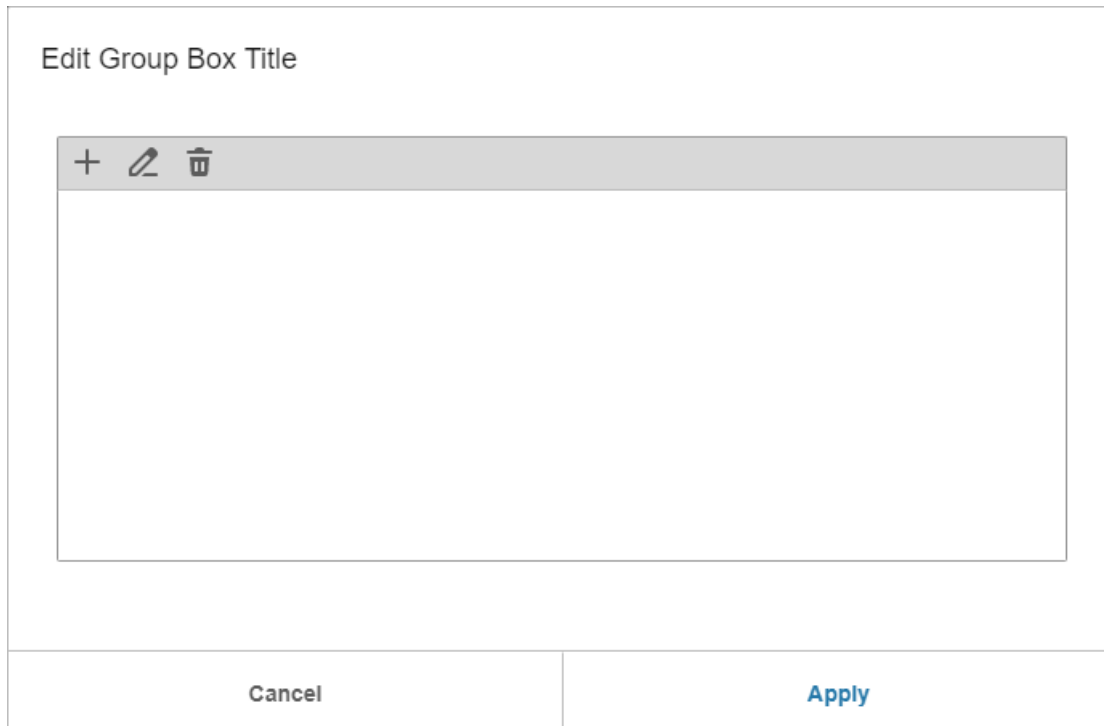
If you do not require a Group Box title, simply click *Apply* and the Group Box will be created and displayed without any text within its Title Bar.

To add a new Group Box title, click the *Add Group Box Title* icon +. The *Add Group Box Title* dialog will open, e.g.

Use the *Locale* field to select the language for this Group Box title or use the **All Languages** option to apply the Group Box title regardless of what language the user has signed in to Infor System I Workspace AnyWhere as.

Use the *Enter Text Override* field to change the text of the Group Box title to a new value.

If instead of entering a Group Box title, you may wish to set the text of the selected field from another field within the IBM i application screen, use the *Or Select Field To Set Text From* dropdown list field to select the screen field to use.

Caution: If the Group Box is set from the *Or Select Field To Set Text From* field, then any changes made to the *Enter Text Override* field will be ignored when applied.

Click *Cancel* to close the *Add Group Box Title* dialog and abort any changes.

Click *Apply* to close the *Add Group Box Title* dialog and update the *Edit Group Box Title* dialog with the new Group Box title, e.g.

Edit Group Box Title

+ ✎ 🗑

All Languages: Row: 2 Column: 1 (Account Code Enquiry)

Cancel   **Apply**

You can add multiple Group Box titles, whether manual or from another field, for different languages, e.g.

Edit Group Box Title

+ ✎ 🗑

All Languages: Row: 2 Column: 1 (Account Code Enquiry)

French: Titre de la zone de groupe
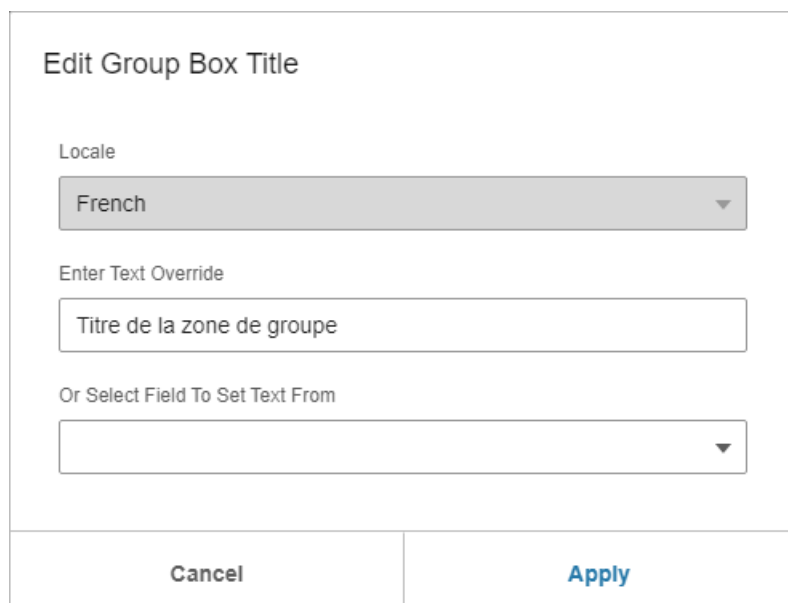
Cancel   **Apply**

Caution: Once a text override has been created for a language, you will not be able to define another text override for the same field for that language.

To change an existing group Box title, first click on the Group Box title in the list to select it, which will highlight the selected row, e.g.

Edit Group Box Title

+ ✎ 🗑	
All Languages:	**Row: 2 Column: 1 (Account Code Enquiry)**
French:	Titre de la zone de groupe

Cancel	Apply
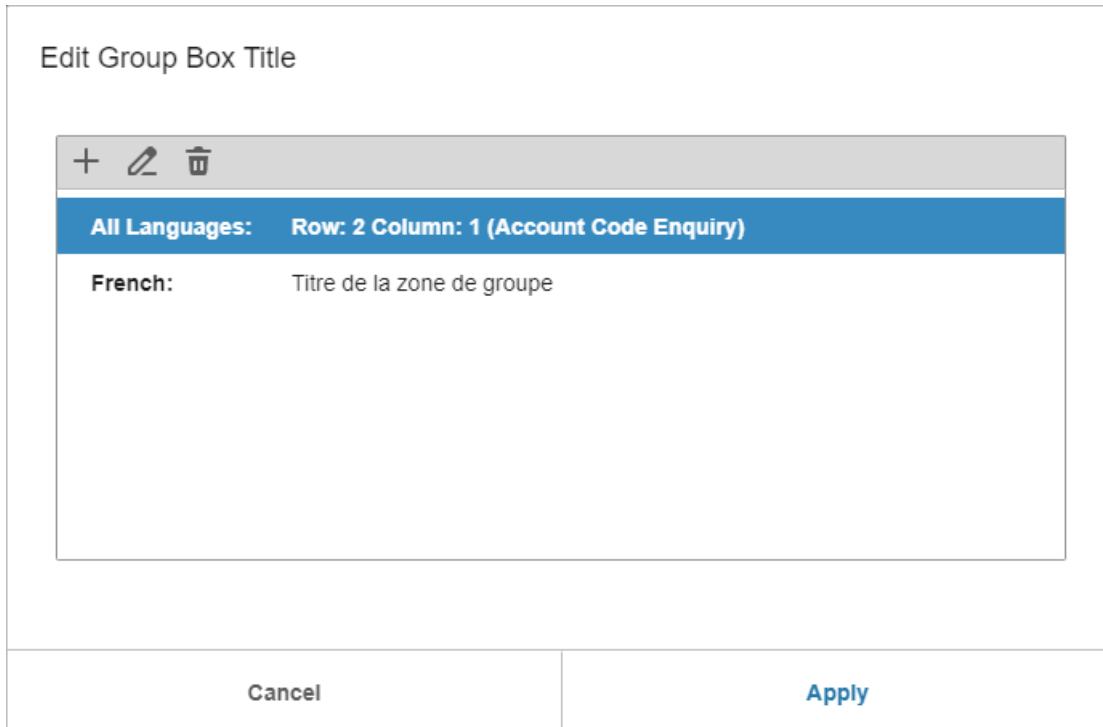
Once selected, to change the Group Box title, click the *Edit Group Box Title* icon ✎ . The *Edit Group Box Title* dialog will open, e.g.

When editing an existing Group Box title, the *Locale* field is displayed, but cannot be changed.

The behaviour of the *Enter Text Override* and *Or Select Field To Set Text From* fields and the *Cancel* and *Apply* actions is the same as in the *Add Group Box Title* dialog described above.

To delete a Group Box title, select the desired row within the *Edit Group Box Title* dialog's list, so that it is highlighted, and then select the *Delete Group Box Title* icon 🗑 . The highlighted row will be removed from the list.

If either of the *Edit Group Box Title* or *Delete group Box Title* buttons are clicked when no row in the *Edit Group Box Title* dialog's list is highlighted, then no change will be performed.

Select *Cancel* to close the *Edit Group Box Title* dialog without making any changes.

Select *Apply* to close the *Edit Group Box Title* dialog and confirm the new Group Box changes.

The Group Box will be drawn immediately. In Designer, a dotted green line is placed around the Group Box area, e.g.

There is no limit to the number of Group Boxes you can add to your design.

If you wish to edit the title of an existing Group Box, click on the Group Box title area to select it (the Status widget will be updated to show the Group Box details) and select the *Fields – Edit Group Box Title* menu option, or right-click on the Group Box title area and select *Edit Group Box Title* from the context menu. The *Edit Group Box Title* dialog will be displayed and function as described above.

Edit a Group Box's Size and Position

If you wish to change the position of a Group Box, press, and hold down the left mouse button on it and drag it to the new desired location, as you would for any other Designer field. Release the mouse button to place the Group Box in its new position.

> **Caution:** If the new position would cause the Group Box's width or height to lie outside the application screen area, the width/height will be automatically updated so they lie within the application's boundaries.

If you wish to edit the position and/or size of a Group Box without drag and drop, click on the Group Box title area to select it (the Status widget will be updated to show the Group Box details) and select the *Fields – Edit Position* menu option, or right-click on the Group Box title area and select *Edit Position* from the context menu. The *Group Box Position* dialog will display, e.g.

Group Box Position

Start Position:

Top
- 19 +

Left
- 27 +

End Position:

Bottom
- 24 +

Right
- 67 +

Cancel   Select

The *Start Position* section defines the top-left corner of the Group Box.

Use the *Top* field to define the row that the Group Box is drawn from. Either enter the value directly or use the spinner control to change the value of the field up or down. The *Top* field value must be in the range 0 to screen height minus one.

Use the *Left* field to define the column that the Group Box is drawn from. Either enter the value directly or use the spinner control to change the value of the field up or down. The *Left* field value must be in the range 0 to screen width minus one.

The *End Position* section defines the bottom-right corner of the Group Box.

Use the *Bottom* field to define the row that the Group Box is drawn to. Either enter the value directly or use the spinner control to change the value of the field up or down. The *Bottom* field value must be in the range 0 to screen height minus one and be greater than the *Top* field value.

Use the *Right* field to define the column that the Group Box is drawn to. Either enter the value directly or use the spinner control to change the value of the field up or down. The *Right* field value must be in the range 0 to screen width minus one and be greater than the *Left* field value.

Choose *Select* to close the dialog and apply the new size and position. The Group Box will be updated and displayed with the new position.

Select *Cancel* to abort any position change and close the dialog.

Remove a Group Box

If you wish to remove a Group Box, click on the Group Box title area to select it (the Status widget will be updated to show the Group Box details) and select the *Fields – Remove Group Box* menu option, or right-click on the Group Box title area and select *Remove Group Box* from the context menu.

You will be prompted to confirm the action, e.g.

Remove Group Box

All field information will be removed. Continue?
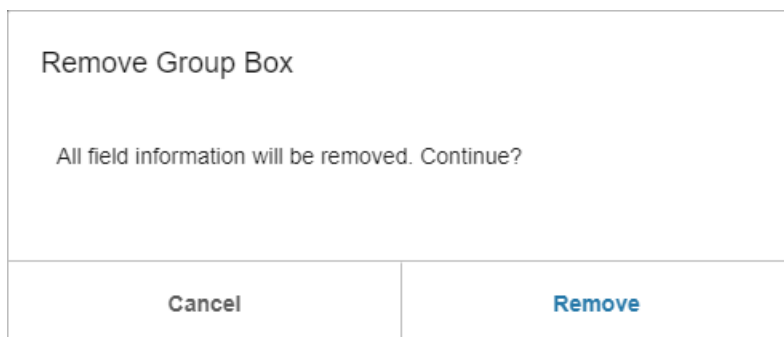
Cancel	Remove

Select *Remove* to remove the Group Box or *Cancel* to keep it.

Define a Window Title Area

A Window Title Area is a design-time rectangular area definition. At run-time, any fields that fall within this area are automatically added to the Window Title. This Designer feature is useful where a IBM i application displays fields based on variable data (e.g. if a Customer is suspended, an extra Label field will be shown). The screen designer may not understand all the various data combinations that cause the additional fields to be displayed, but as long as they know the area within the screen where the additional fields will be displayed, they can use the Window Title Area facility to make sure those fields are added to the display title when available.

To define a Window Title Area, select the *Fields – Define a Window Title Area* menu item. This will put Designer into *Define Title Area Mode*. In this mode, you can use the mouse to draw a rectangular area that encapsulates any fields you wish to include within the Window Title.

If you wish to abort the *Define Title Area Mode*, select *Fields – Cancel Window Title Area Definition* or, press the right mouse button and select *Cancel Window Title Area Definition* from the context menu.

To draw a rectangle, press and hold the left mouse button within the application screen, and move the mouse. You will see a "rubber-band" rectangle that will track the mouse pointer, e.g.

As you move the mouse, a badge control is placed next to the mouse cursor showing the cell row and column that the mouse button was first pressed in (labelled Start), and the cell row and column that the bottom-right corner of the rubber-band area is currently on (labelled End).

When you have sized the rectangle to the area you require, release the left mouse button. The *Edit Fields Used For Window Title* dialog will be displayed, e.g.

Within the list, any Window Title Area definitions begin with the word *Area*. Any fields within the area are shown next to the position.

Click *Close* to Apply the Window Title area.

Within Designer, a Window Title Area is shown as a blue rectangle and any fields that fall within the area are added to the Window Title, e.g.
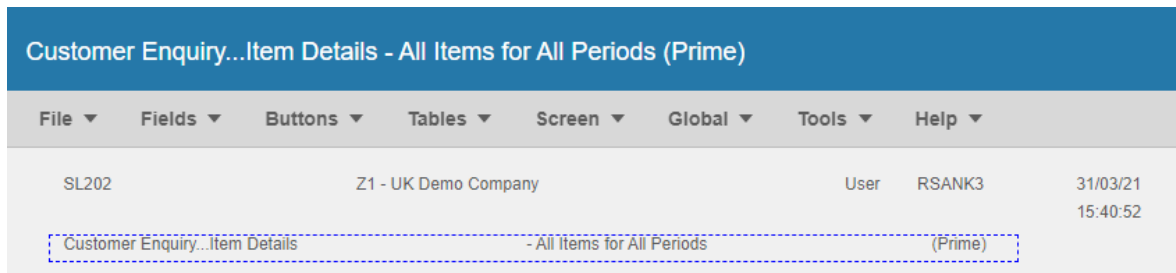
At run-time, the blue rectangle is not shown.

There is no limit to the number of Window Title Area definitions you can add to your design.

You can mix any combination of Window Title Area's and individual field values to construct the Window Title.

Edit a Window Title Area's Position

If you wish to edit the position of a Window title Area, select the *Fields – Edit Window Title Fields* option. The *Edit Fields Used For Window Title* dialog will be displayed.

Select a Window Title Area within the list then select the *Edit Window Title Area* button to alter the highlighted Window Title Area's size and location. The *Edit Window Title Area* dialog will display, e.g.

Edit Window Title Area

Start Position:

Top

-    2   +

Left

-    0   +

End Position:

Bottom

-    2   +

Right

-    66   +

Cancel   **Select**

The *Start Position* section defines the top-left corner of the Window Title Area.

Use the *Top* field to define the row that the Window Title Area is drawn from. Either enter the value directly or use the spinner control to change the value of the field up or down. The *Top* field value must be in the range 0 to screen height minus one.

Use the *Left* field to define the column that the Window Title Area is drawn from. Either enter the value directly or use the spinner control to change the value of the field up or down. The *Left* field value must be in the range 0 to screen width minus one.

The *End Position* section defines the bottom-right corner of the Window Title Area.

Use the *Bottom* field to define the row that the Window Title Area is drawn to. Either enter the value directly or use the spinner control to change the value of the field up or down. The *Bottom* field value must be in the range 0 to screen height minus one and be greater than or equal to the *Top* field value.

Use the *Right* field to define the column that the Window Title Area is drawn to. Either enter the value directly or use the spinner control to change the value of the field up or down. The *Right* field value must be in the range 0 to screen height minus one and be greater than or equal to the *Left* field value.

Choose *Select* to close the dialog and apply the new position. The Window Title Area will be updated and displayed with the new position.

Select *Cancel* to abort any position change and close the dialog.

Select *Close* to close the *Edit Fields Used For Window Title* dialog.

Remove a Window Title Area

If you wish to remove a Window Title Area, select the *Fields – Edit Window Title Fields* option. The *Edit Fields Used For Window Title* dialog will be displayed.

Select a Window Title Area within the list then select the *Remove Field From List* button 🗑 to delete the Window Title Area. The Window Title will be updated, and the blue rectangle removed from within the design.
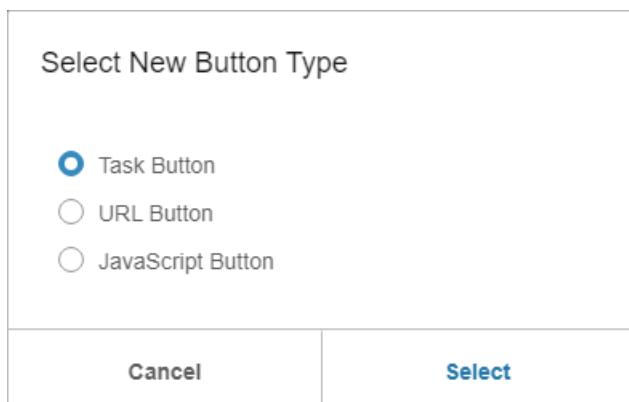
Select *Close* to close the *Edit Fields Used For Window Title* dialog.

Add a Task Button

A Task Button will allow the user to launch another IBM i application task or command from a Button within the application screen. The task/command will open within a new tab.

The user must be authorised to the task or to run commands within Infor System I Workspace AnyWhere or they will see an authorisation error message.

To add a Task Button, select the *Buttons – Add Button* menu item. The *Select New Button Type* dialog will open, e.g.

Select New Button Type

○ Task Button
○ URL Button
○ JavaScript Button

| Cancel | Select |

Select the *Task Button* option from the *Select New Button Type* dialog then choose the *Select* option. The *Task Button Properties* dialog will appear, e.g.

Task Button Properties

Task Shortcut or System i Command:

[   ]

☐ Show Task in Popup Window

Overrides   + 🖵 ✎ 🗑

Screen	Target	Value

No Data Available

Cancel	Select
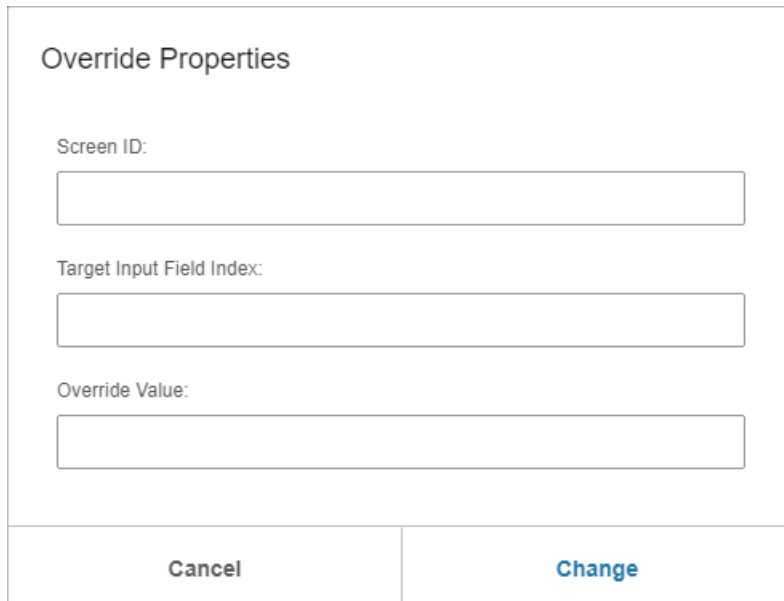
In the *Task Shortcut or System i Command* field, enter the System i Manager Task shortcut (e.g. 1/OEE, 12/GLE), the System i Manager eleven character Task Code (e.g. OEAULA31200), or a IBM i command (e.g. WRKSPLF, DSPJOB) that you wish to associate with this Button.

Check the *Show Task in Popup Window* option if you want the task to open in an external popup window outside the main Infor System I Workspace AnyWhere interface.

> **Caution:** This option will be ignored if the *Allow Popup Emulator/URL Windows* option for the Infor System I Workspace AnyWhere Profile in Workspace Configuration has been disabled.

In the *Overrides* grid, you can create a list of task overrides to pass into the IBM i application to populate its fields with values and auto-press its command keys. There are three types of overrides; *Fixed Values* (i.e. hard-coded text and actions), *Screen Fields* (i.e. values taken dynamically from the screen at run-time) and *Designer Variables* (i.e. values saved to a named storage area at runtime, these are covered in more detail in a later section). There is no limit to the number of overrides you can create. You do not have to assign overrides if none are required.

To add a Fixed Value override, select the *Add Fixed Value* icon ✚ from the *Overrides* grid toolbar. The *Override Properties* dialog will be shown, e.g.

Override Properties

Screen ID:

Target Input Field Index:

Override Value:

Cancel	Change

In the *Screen ID* field, enter the unique screen ID (i.e. the *Magic Number*) of the IBM i application screen you wish this override to apply to. You can leave this field blank to apply the override to the first screen of the IBM i application.

In the *Target Input Field Index*, enter a numeric value for the index of the input field within the target IBM i application screen (starting at index 0 for the first input field on the destination screen). This field cannot be blank.

You may also enter a special value of **F** here which will allow you to specify a function key as the *Override Value*.

You may also enter a special value of **H** here, with an *Override Value* of **1**, which will hide the named screen.

> **Caution:** For a Task Button's overrides, only use the special value of **H** (hide screen) in combination with a second override that uses the **F** value (press function key) for each screen or you could end up with an invisible task that cannot be accessed.

> **Caution:** If an error message is displayed during the Task Button's override processing, and the screen has been hidden using the **H** override value, it will automatically become visible.

In the *Override Value* field, enter the data that you wish to apply to the target field (e.g. a fixed delivery sequence). You may use substitution values here (as defined in the Substitution Parameters section of the Infor System I Workspace AnyWhere *Product Guide*). These will be resolved
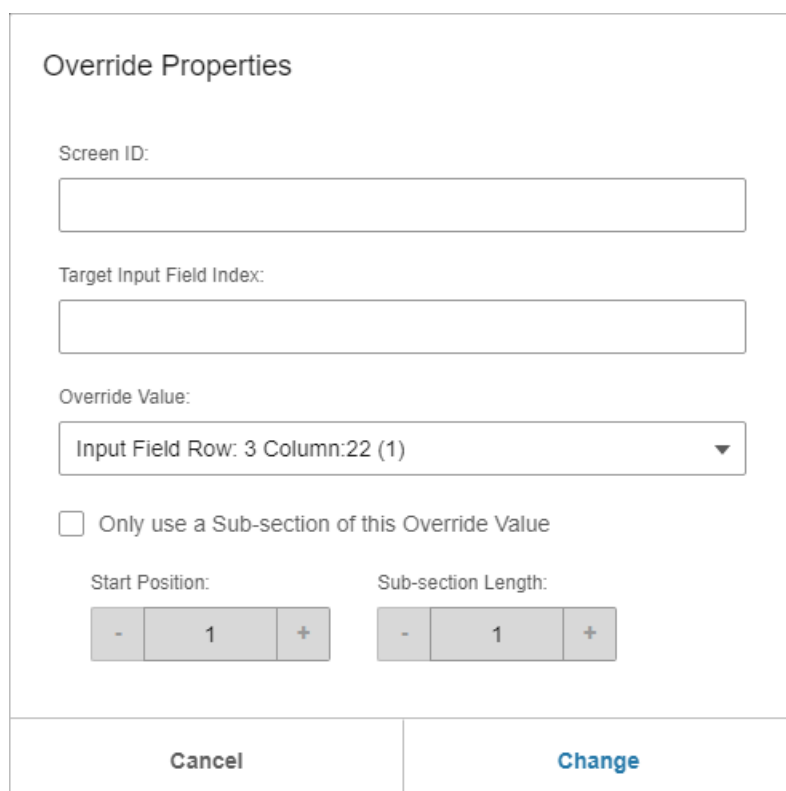
dynamically at run-time (e.g. a value of %{company} will be converted to the user's current Company Code at run-time and placed into the target field).

If the *Target Input Field Index* is set to F, then the *Override Value* should be set to a numeric value. A value of 1 to 24 will activate the appropriate function (aid) key on the target System i application screen. A value of 0 will activate the Enter key on the target System i application screen.

Select *Change* to confirm the override or *Cancel* to discard it.

To add a Screen Field or Designer Variable override, select the *Add Screen Field or Designer Variable* icon 🖵 from the *Overrides* grid toolbar.

The *Override Properties* dialog will be shown, e.g.

Override Properties

Screen ID:

Target Input Field Index:

Override Value:

Input Field Row: 3 Column:22 (1)   ▼

☐ Only use a Sub-section of this Override Value

Start Position: Sub-section Length:

-    1   +   -   1   +

Cancel   Change

In the *Screen ID* field, enter the unique screen ID (i.e. the *Magic Number*) of the IBM i application screen you wish this override to apply to. You can leave this field blank to apply the override to the first screen of the IBM i application.

In the *Target Input Field Index*, enter a numeric value for the index of the input field within the target IBM i application screen (starting at index 0 for the first input field on the destination screen). This field cannot be blank.

In the *Override Value* field, select the input/output field from the current application screen that will be dynamically read at run-time and passed as an override to the task, or select a Designer Variable. The fields in the drop-down are listed using their host row/column position along with their current content (in brackets) to make it easier to determine which one to select.

The list also contains hidden/non-display field values.

Check the *Only use a Sub-section of this Override Value* field to elect to use only a part of the Screen Field/Designer Variable as the Override Value. If this is unchecked, the whole field will be used.

Use the *Start Position* numeric field to set the character position that marks the beginning of the sub-section.

Use the *Sub-section Length* numeric field to set the size of the override value sub-section.

Select *Change* to confirm the override or *Cancel* to discard it.

To edit an override within the *Task Button Properties* dialog's *Overrides* grid, select an override in the grid to highlight it then select the *Edit* icon 𝒜 from the toolbar. The appropriate *Override Properties* dialog will be displayed.

To remove an override from the *Task Button Properties* dialog's *Overrides* grid, select an override in the grid to highlight it and then select the *Remove* icon 🗑 from the toolbar. The override will be removed from the *Overrides* grid.

In the *Task Button Properties* dialog, choose *Select* to proceed or *Cancel* to discard. If you choose *Select*, the *Edit Button Text Override* dialog is shown, e.g.

Edit Button Text Override

+ 𝒜 🗑

Cancel	Apply
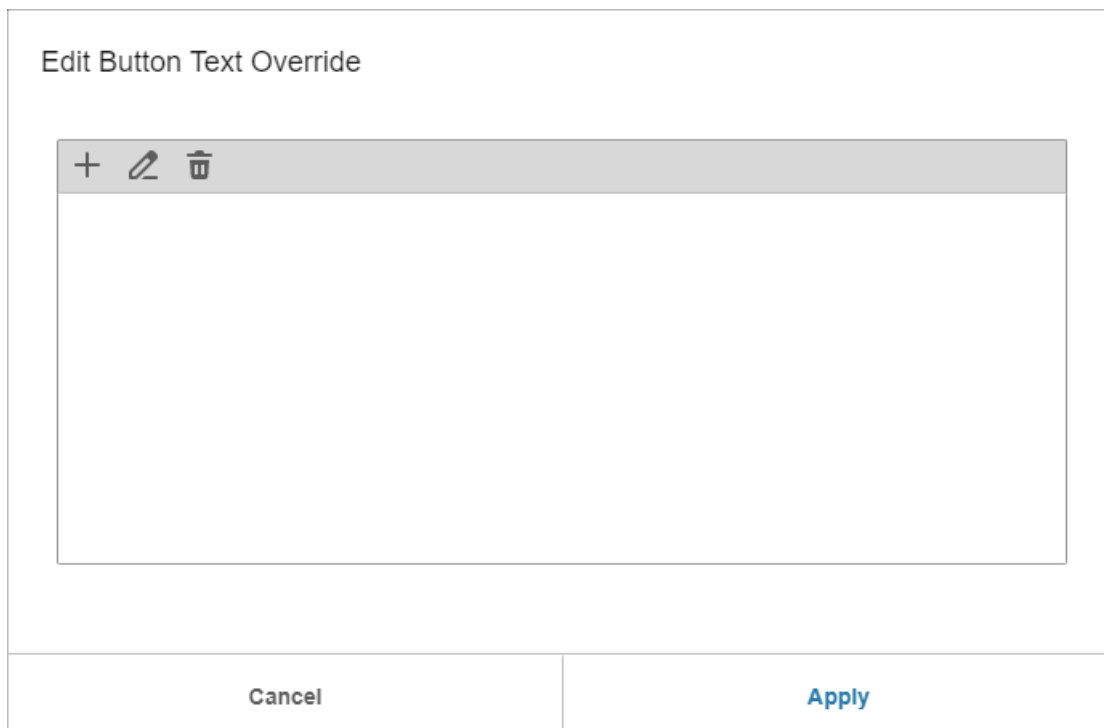
Assign the Task Button a label for either **All Languages** or for specific locales (in regard to creating and editing multi-locale text, the behaviour of this dialog is the same as documented in the *Changing Label/Edit Field Text* or *Add a Tooltip to a Label, Edit or Button Field* sections earlier within the guide). Select *Apply* to add the Task Button to your design or *Cancel* to discard it.

For Task Buttons, the Button's text will initially be used as the title for the new Module Tab that is opened within the Infor System I Workspace AnyWhere.

> **Caution:** Unlike application buttons, Task Buttons do not have any associated function key so only plain text should be entered in your Button Text Overrides (e.g. you should not enter **F5=Order Enquiry**, only **Order Enquiry**). You cannot associate a Task Button with a function key shortcut.

On selecting *Apply*, the Button will appear on the application screen, e.g.

| Exit | Prompt | Order amend | New Task |
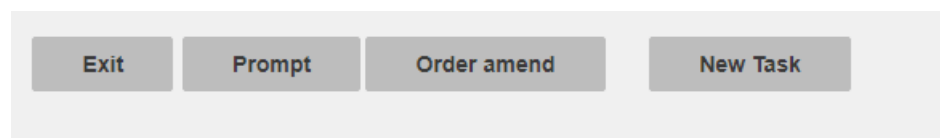
If the Task Button is not in a suitable location for your screen design, just drag it to a new position as you would for any other field within Designer.
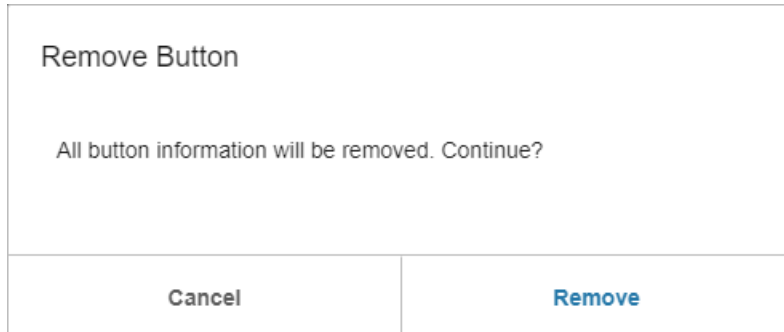
> **Caution:** The Compress space between buttons preference may affect and alter the location of the Task Button at run-time.

If you wish to change an existing Task Button's task/command or overrides, select the Button field with the left mouse button and then select the *Buttons – Properties* menu item or, press the right mouse when the mouse is over the field and select *Properties* from the context menu. The *Task Button Properties* dialog is shown.

If you wish to change an existing Task Button's label text, select the Button field with the left mouse button and then select the *Buttons – Edit Text* menu item or, press the right mouse when the mouse is over the field and select *Edit Text* from the context menu. The *Edit Button Text Override* dialog is shown.

Remove a Task Button

If you wish to remove a Task Button, select the Button field with the left mouse button and then select the *Buttons – Remove Button* menu item or, press the right mouse when the mouse is over the field and select *Remove Button* from the context menu. You will be prompted to confirm the action, e.g.
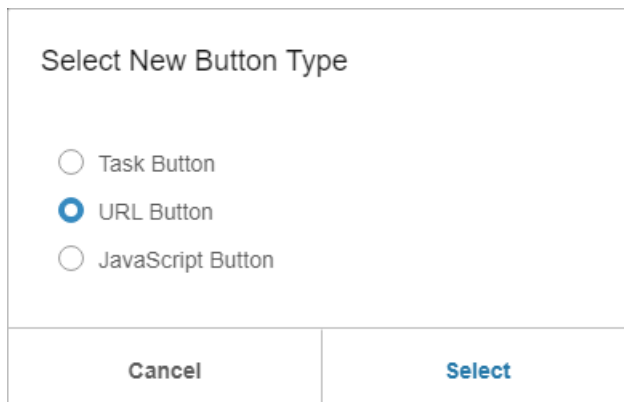
Remove Button

All button information will be removed. Continue?

Cancel	Remove

Select *Remove* to remove the Button or *Cancel* to keep it.

Add a URL Button

The URL Button will allow the user to launch a webpage from a Button within the application screen. The webpage will open within a new Infor System I Workspace AnyWhere module tab.

To add a URL Button, select the *Buttons – Add Button* menu item. The *Select New Button Type* dialog will appear, e.g.

Select New Button Type

○ Task Button
● URL Button
○ JavaScript Button

Cancel	Select

Select *URL Button* from the *Select New Button Type* dialog then choose the *Select* option. The *URL Button Properties* dialog will appear, e.g.

URL Button Properties

URL:

https://

☐ Show URL in Popup Window

Parameters   + 🖵 ✎ 🗑

Parameter Name	Value	Joined

⚠

No Data Available

Cancel	Select

The *URL* field is where you enter the URL for the webpage that the button will launch. This should use the standard URL format that you would type into an Internet Browser's address field (starting with `https://` or `http://`); E.g.

URL Button Properties

URL:

https://www.infor.com
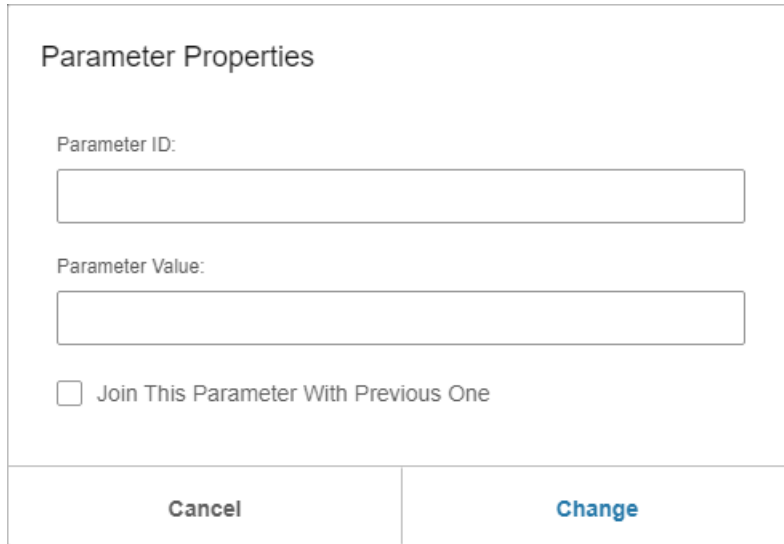
Check the *Show URL in Popup Window* option if you want the URL to open in an external popup window outside the main Infor System I Workspace AnyWhere interface.

Caution: This option will be ignored if the *Allow Popup Emulator/URL Windows* option for the Infor System I Workspace AnyWhere Profile in Workspace Configuration has been disabled.

In the *Parameters* grid, you can create a list of parameters to pass in to the web-page. There are three types of parameters; *Fixed Values* (i.e. hard-coded text), *Screen Fields* (i.e. values taken dynamically from the screen at run-time) and *Designer Variables* (i.e. values saved to a named storage area at runtime, these are covered in more detail in a later section). There is no limit to the number of parameters you can create. You do not have to assign parameters if none are required.

To add a Fixed Value parameter, select the *Add Fixed Value* icon ┼ from the *Parameters* grid toolbar. The *Parameter Properties* dialog will be shown, e.g.

Parameter Properties

Parameter ID:

Parameter Value:

☐ Join This Parameter With Previous One

Cancel   Change

In the *Parameter ID* field, enter the name of a URL parameter that the webpage accepts.

In the *Parameter Value* field, enter the data that you wish to pass in as a parameter. You may use substitution values here (as defined in the Substitution Parameters section in the Infor System I Workspace AnyWhere *Product Guide*). These will be resolved dynamically at run-time (e.g. a value of %{company} will be converted to the user's current Company Code at run-time and used as the parameter value).

Check the *Join This Parameter With Previous One* field to concatenate the value of this field with the preceding field in the *Parameters* grid.

Select *Change* to confirm the parameter value setting or *Cancel* to discard it.

To add a Screen Field or Designer Variable parameter select *the Add Screen Field or Designer Variable* icon ⬚ from the *Parameters* grid toolbar. The *Parameter Properties* dialog will be shown, e.g.

Parameter Properties

Parameter ID:

Parameter Value:

| Input Field Row: 3 Column:22 (1) ▼ |

☐ Join This Parameter With Previous One

☐ Only use a Sub-section of this Override Value

Start Position: Sub-section Length:

| - | 1 | + | | - | 1 | + |

| Cancel | Change |

In the *Parameter ID* field, enter the name of a parameter that the webpage accepts.

In the *Parameter Value* field, select the input/output field from the current application screen, or a Designer Variable, that will be dynamically read at run-time and passed as a parameter to the webpage. The fields in the drop-down are listed using their host row/column position along with their current content (in brackets) to make it easier to determine which one to select.

The list also contains hidden/non-display field values.

Check the *Join This Parameter With Previous One* field to concatenate the value of this field with the preceding field in the *Parameters* grid.

Check the *Only use a Sub-section of this Parameter Value* field to elect to use only a part of the Screen Field or Designer Variable as the Parameter Value. If this is unchecked, the whole field will be used.

Use the *Start Position* numeric field to set the character position that marks the beginning of the sub-section.

Use the *Sub-section Length* numeric field to set the size of the override value sub-section.

Select *Change* to confirm the parameter setting or *Cancel* to discard it.

To edit a parameter within the *URL Button Properties* dialog's *Parameters* grid, select any parameter in the grid to highlight it then select the *Edit* icon ✐ from the toolbar. The appropriate *Parameter Properties* dialog will be displayed.

To change the order of the parameters, press and hold down your mouse button on the ⋮ icon in the first column of the *Parameters* grid, drag the row to the new location, then release the mouse button to assign it to that position within the grid.

To remove a parameter from the *URL Button Properties* dialog's *Parameters* grid, select any parameter in the grid to highlight it and then select the *Remove* icon 🗑 from the toolbar. The parameter will be removed from the *Parameters* grid.

If a parameter is joined to another, then in the *Joined* column of the *Parameters* grid, a green tick will appear for that parameter row, e.g.

In the *URL Button Properties* dialog, choose *Select* to proceed or *Cancel* to discard. If you choose *Select*, the *Edit Button Text Override* dialog is shown, e.g.

Edit Button Text Override

+ ✏ 🗑

Cancel   **Apply**

Assign the URL Button a label for either **All Languages** or for specific locales (in regard to creating and editing multi-locale text, the behaviour of this dialog is the same as documented in the *Changing Label/Edit Field Text* or *Add a Tooltip to a Label, Edit or Button Field* sections earlier within the guide). Select *Apply* to add the URL Button to your design or *Cancel* to discard it.

For URL Buttons, the Button's text will be used as the title for the new Module Tab that is opened within the Infor System I Workspace AnyWhere.

> **Caution:** Unlike application buttons, URL Buttons do not have any associated function key so only plain text should be entered (e.g. you should not enter **F17=Open URL** just **Open URL**). You cannot associate a URL Button with a function key shortcut.

On selecting *Apply*, the URL Button will appear on the application screen, e.g.

Exit   Prompt   Order amend   Open URL
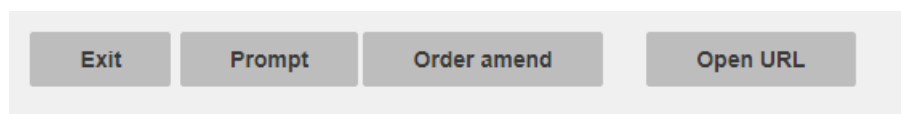
If the URL Button is not in a suitable location for your screen design, just drag it to a new position as you would for any other field within Designer.

> **Caution:** The Compress space between buttons preference may affect and alter the location of the URL Button at run-time.

If you wish to change an existing URL Button's web address or parameters, select the URL Button field with the left mouse button and then select the *Buttons – Properties* menu item or, press the right mouse when the mouse is over the field and select *Properties* from the context menu. The *URL Button Properties* dialog is shown.

If you wish to change an existing URL Button's label text, select the URL Button field with the left mouse button and then select the *Buttons – Edit Text* menu item or, press the right mouse when the mouse is over the field and select *Edit Text* from the context menu. The *Edit Button Text Override* dialog is shown.

> **Caution:** Many commercial webpages now send HTTP headers that prevent them from displaying within another product, or within an IFRAME. At run-time, if the new Module Tab contains no data or an error, check your Web Browsers error console to discover the reason why the display of the page has failed or been blocked.

Remove a URL Button

If you wish to remove the URL Button, select the Button field with the left mouse button and then select the *Buttons – Remove Button* menu item or, press the right mouse when the mouse is over the field and select *Remove Button* from the context menu. You will be prompted to confirm the action, e.g.

Remove Button

All button information will be removed. Continue?
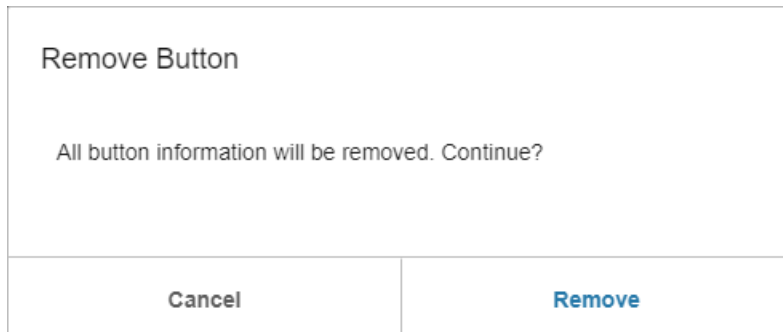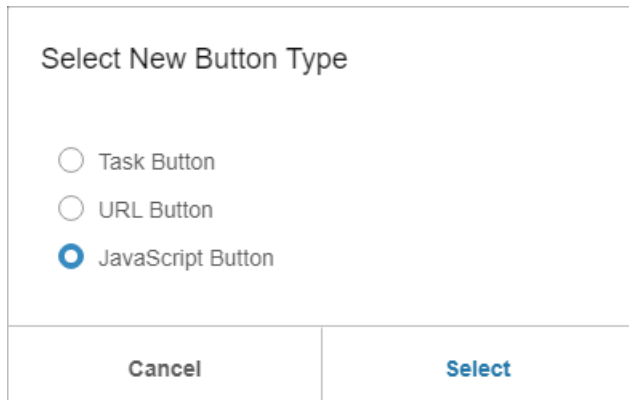
| Cancel | **Remove** |

Select *Remove* to remove the Button or *Cancel* to keep it.

Add a JavaScript Button

The JavaScript Button will allow the user to call a client-side JavaScript function (also known as a JavaScript method) within the `5250-extensions.js` file, or within any JavaScript file stored in the `static/customScripts/5250` sub-folder of the Infor System I Workspace AnyWhere install, that are included into every 5250 AnyWhere Emulator session. Parameters can be passed from the screen into the JavaScript method.

For more information about the `5250-extensions.js` file, the `static/customScripts/5250` sub-folder, and writing your own JavaScript extensions for Infor System I Workspace AnyWhere, see the *Emulator Extensions Guide.*

To add a JavaScript Button, select the *Buttons – Add Button* menu item. The *Select New Button Type* dialog will appear, e.g.

Select New Button Type

○ Task Button
○ URL Button
● JavaScript Button

Cancel	Select

Select *JavaScript Button* from the *Select New Button Type* dialog then choose the *Select* option. The *JavaScript Button Properties* dialog will appear, e.g.

JavaScript Button Properties

JavaScript Function Name:

Parameters   + ⬚ ✎ 🗑

Parameter Name	Value	Joined

No Data Available

Cancel	Select

The *JavaScript Function Name* field is where you enter the JavaScript function name that the button will launch. This should just be the name of the function, with no code punctuation marks such as brackets or semi-colons, e.g.
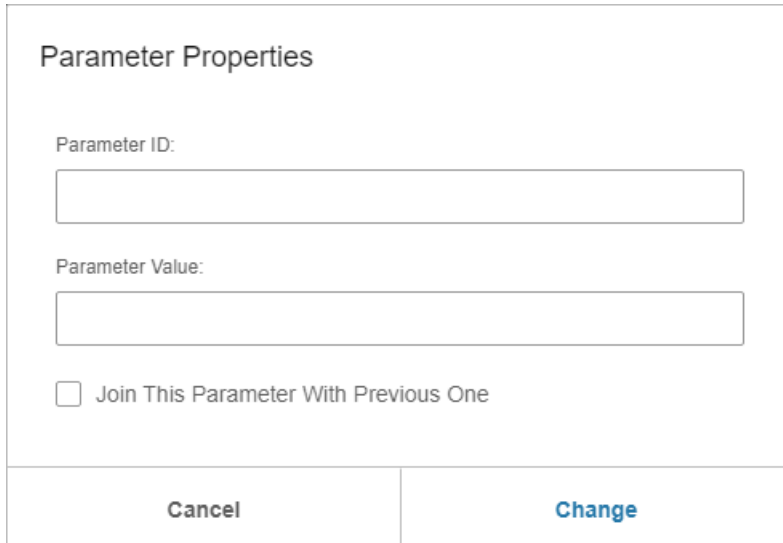
JavaScript Button Properties

JavaScript Function Name:

showItemImage

In the *Parameters* grid, you can create a list of parameters to pass into the JavaScript function. The parameters will be passed in the descending order that they appear in the grid. There are three types of parameters; *Fixed Values* (i.e. hard-coded text), *Screen Fields* (i.e. values taken dynamically from the screen at run-time) and *Designer Variables* (i.e. values saved to a named storage area at runtime, these are covered in more detail in a later section). There is no limit to the number of parameters you can create. You do not have to assign parameters if none are required.

The parameters are passed to the JavaScript function as string variables. You can use various in-built JavaScript functions within your method to convert the strings to other variable types (e.g. use `parseInt` function to convert a string to an integer).

To add a Fixed Value parameter, select the *Add Fixed Value* icon ╋ from the *Parameters* grid toolbar. The *Parameter Properties* dialog will be shown, e.g.

Parameter Properties

Parameter ID:

Parameter Value:

☐ Join This Parameter With Previous One

Cancel   Change

In the *Parameter ID* field, enter a token name to uniquely identify this parameter (any alpha-numeric value will suffice).

In the *Parameter Value* field, enter the data that you wish to pass in as a parameter (e.g. a fixed file name). You may use substitution values here (as defined in the Substitution Parameters section in the Infor System I Workspace AnyWhere *Product Guide*). These will be resolved dynamically at run-time (e.g. a value of %{company} will be converted to the user's current Company Code at run-time and used as the parameter value).

Check the *Join This Parameter With Previous One* field to concatenate the value of this field with the preceding field in the *Parameters* grid.

Select *Change* to confirm the parameter setting or *Cancel* to discard it.

To add a Screen Field or Designer Variable parameter select *the Add Screen Field or Designer Variable* icon ⬚ from the *Parameters* grid toolbar. The *Parameter Properties* dialog will be shown, e.g.

Parameter Properties

Parameter ID:

Parameter Value:

Input Field Row: 3 Column:22 (1)

☐ Join This Parameter With Previous One

☐ Only use a Sub-section of this Override Value

Start Position: Sub-section Length:

| - | 1 | + | | - | 1 | + |

| Cancel | Change |

In the *Parameter ID* field, enter a token name to uniquely identify this parameter (any alpha-numeric value will suffice).

In the *Parameter Value* field, select the input/output field from the current application screen that will be dynamically read at run-time and passed as a parameter to the JavaScript method. The fields in the drop-down are listed using their host row/column position along with their current content (in brackets) to make it easier to determine which one to select.

The list also contains hidden/non-display field values.

Check the *Join This Parameter With Previous One* field to concatenate the value of this field with the preceding field in the *Parameters* grid.

Check the *Only use a Sub-section of this Parameter Value* field to elect to use only a part of the Screen Field as the Parameter Value. If this is unchecked, the whole field will be used.

Use the *Start Position* numeric field to set the character position that marks the beginning of the sub-section.

Use the *Sub-section Length* numeric field to set the size of the override value sub-section.

Select *Change* to confirm the parameter setting or *Cancel* to discard it.

To edit a parameter within the *JavaScript Button Properties* dialog's *Parameters* grid, select any parameter in the grid to highlight it then select the *Edit* icon ✐ from the toolbar. The appropriate *Parameter Properties* dialog will be displayed.

To change the order of the parameters, press and hold down your mouse button on the ⋮ icon in the first column of the *Parameters* grid, drag the row to the new location, then release the mouse button to assign it to that position within the grid.

To remove a parameter from the *JavaScript Button Properties* dialog's *Parameters* grid, select any parameter in the grid to highlight it and then select the *Remove* icon 🗑 from the toolbar. The parameter will be removed from the *Parameters* grid.

If a parameter is joined to another, then in the *Joined* column of the *Parameters* grid, a green tick will appear for that parameter row, e.g.

In the *JavaScript Button Properties* dialog, choose *Select* to proceed or *Cancel* to discard. If you choose *Select*, the *Edit Button Text Override* dialog is shown, e.g.

Edit Button Text Override

+ ✏ 🗑

Cancel   **Apply**

Assign the JavaScript Button a label for either **All Languages** or for specific locales (in regard to creating and editing multi-locale text, the behaviour of this dialog is the same as documented in the *Changing Label/Edit Field Text* or *Add a Tooltip to a Label, Edit or Button Field* sections earlier within the guide). Select *Apply* to add the JavaScript Button to your design or *Cancel* to discard it.

> **Caution:** Unlike application buttons, JavaScript Buttons do not have any associated function key so only plain text should be entered (e.g. you should not enter **F17=Call JS Method** just **Call JS Method**). You cannot associate a JavaScript Button with a function key shortcut.

On selecting *Apply*, the JavaScript Button will appear on the application screen, e.g.

| Exit | Prompt | Order amend | JavaScript Button |
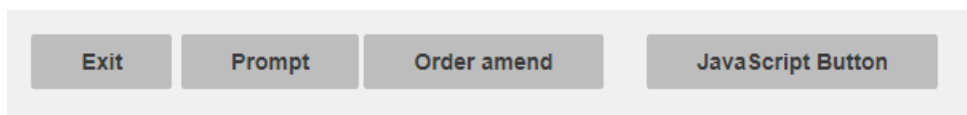
If the JavaScript Button is not in a suitable location for your screen design, just drag it to a new position as you would for any other field within Designer.

> **Caution:** The Compress space between buttons preference may affect and alter the location of the JavaScript Button at run-time.

If you wish to change an existing JavaScript Button's method or parameters, select the JavaScript Button field with the left mouse button and then select the *Buttons – Properties* menu item or, press the right mouse when the mouse is over the field and select *Properties* from the context menu. The *JavaScript Button Properties* dialog is shown.

If you wish to change an existing JavaScript Button's label text, select the JavaScript Button field with the left mouse button and then select the *Buttons – Edit Text* menu item or, press the right mouse when the mouse is over the field and select *Edit Text* from the context menu. The *Edit Button Text Override* dialog is shown.

At run-time, if the function that you have defined within the JavaScript button properties cannot be found, or contains an error, the user will see a message when the button is activated, e.g.
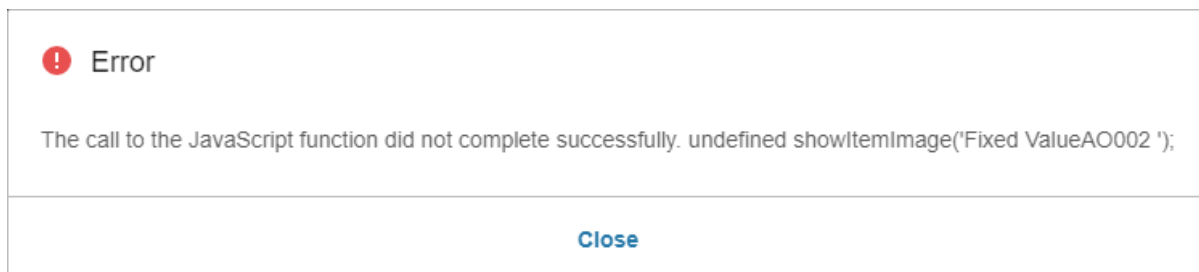
At the end of the error message, the JavaScript error (e.g. "undefined" in the above example) and the actual method call (plus any parameters with their raw value) are also displayed.

Removing a JavaScript Button

If you wish to remove the JavaScript Button, select the Button field with the left mouse button and then select the *Buttons – Remove Button* menu item or, press the right mouse when the mouse is over the field and select *Remove Button* from the context menu. You will be prompted to confirm the action, e.g.

Select *Remove* to remove the Button or *Cancel* to keep it.

Add a Widget Button

Widgets are extensions to the Infor System I Workspace AnyWhere user interface that provide complimentary functionality to the user (e.g. display an image of the current item they are ordering, list their current System i Spool Files).

See the *Global Widgets* section for more information on how to create a Widget definition.

The Widget Button will allow the user to open a Widget definition from a button. The Widget will open within the current tab, to the right of the 5250 AnyWhere Emulator, unless it is already displayed.

To add a Widget Button, select the *Buttons – Add Button* menu item. The *Select New Button Type* dialog will appear, e.g.

Select New Button Type

○ Task Button

○ URL Button

○ JavaScript Button

● Widget Button

| Cancel | Select |

Caution: If the *Widget Button* option does not appear then there are no Global Widget Definitions defined for the current Infor System I Workspace AnyWhere Profile.

Select *Widget Button* from the *Select New Button Type* dialog then choose the *Select* option. The *Select Widget* dialog will appear, e.g.

The drop-down list contains all the Widgets defined for the current Infor System I Workspace AnyWhere Profile.

Check the *Automatically Close Widget* field if you want the 5250 AnyWhere Emulator to control the dismissal of the Widget. Once selected, the radio buttons below this field become enabled. Select one of the options….

Option	Description
On Any Screen Change	Each IBM i screen has a unique index (Magic Number). If the Magic Number of the new screen is different to the one that initiated the Widget display, the Widget will be automatically removed from the display.
Only on Full Screen Change	Same as the previous option except the Widget will only be automatically removed from the display if the new screen is a completely new screen. If the new screen is a popup window, the Widget will not be removed.

Check the *Allow User To Close Widget* field if you want to allow the user the ability to manually dismiss the Widget.

Caution: You must select at least one of these options otherwise the user will be left in a situation where they cannot remove the Widget from the display. If neither is selected, the *Allow User To Close Widget* option will be selected by default.

Choose *Select* to accept the Widget settings or choose *Cancel* to discard any changes made within the *Select Widget* dialog.

If you choose the *Select* option, and you have not selected a Widget, you will see the following error message…
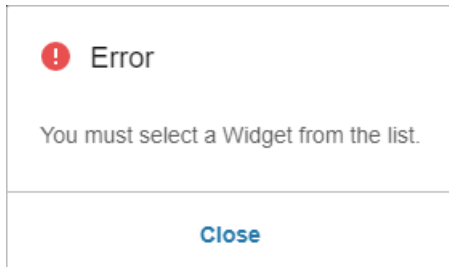
Select *Close* to close the error message and either select an entry from the *drop-down list* or select the *Cancel* option to discard the Widget Button definition.

If you choose the *Select* option in the *Select Widget* dialog, the *Edit Button Text Override* dialog is shown, e.g.
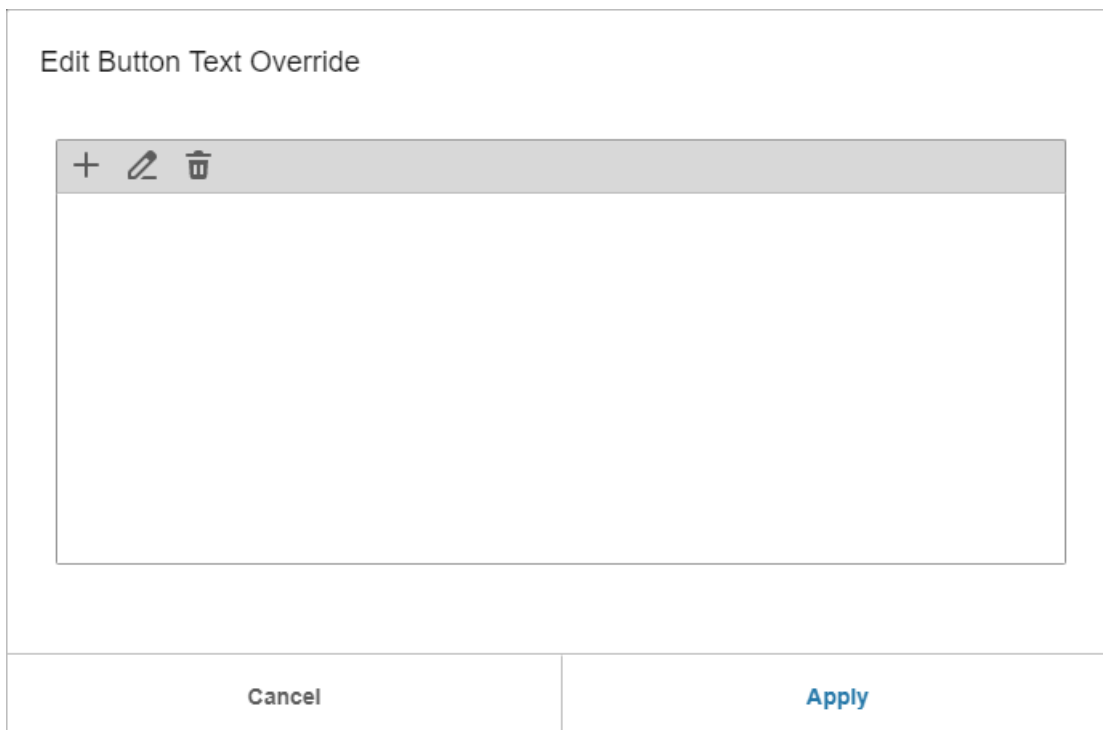
Assign the Widget Button a label for either **All Languages** or for specific locales (in regard to creating and editing multi-locale text, the behaviour of this dialog is the same as documented in the *Changing Label/Edit Field Text* or *Add a Tooltip to a Label, Edit or Button Field* sections earlier within the guide). Select *Apply* to add the Widget Button to your design or *Cancel* to discard it.

> **Caution:** Unlike application buttons, Widget Buttons do not have any associated function key so only plain text should be entered (e.g. you should not enter **F17=Open Widget** just **Open Widget**). You cannot associate a Widget Button with a function key shortcut.

On selecting *Apply*, the Widget Button will appear on the application screen, e.g.
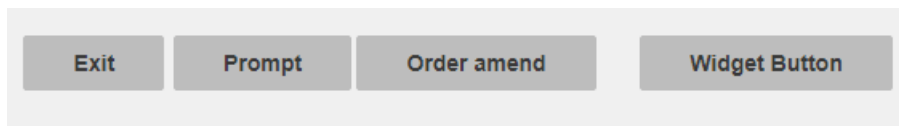
If the Widget Button is not in a suitable location for your screen design, just drag it to a new position as you would for any other field within Designer.

> **Caution:** The Compress space between buttons preference may affect and alter the location of the Widget Button at run-time.

If you wish to change an existing Widget Button's properties, select the Widget Button field with the left mouse button and then select the *Buttons – Properties* menu item or, press the right mouse when the mouse is over the field and select *Properties* from the context menu. The *Select Widget* dialog is shown.

If you wish to change an existing Widget Button's label text, select the Widget Button field with the left mouse button and then select the *Buttons – Edit Text* menu item or, press the right mouse when the mouse is over the field and select *Edit Text* from the context menu. The *Edit Button Text Override* dialog is shown.
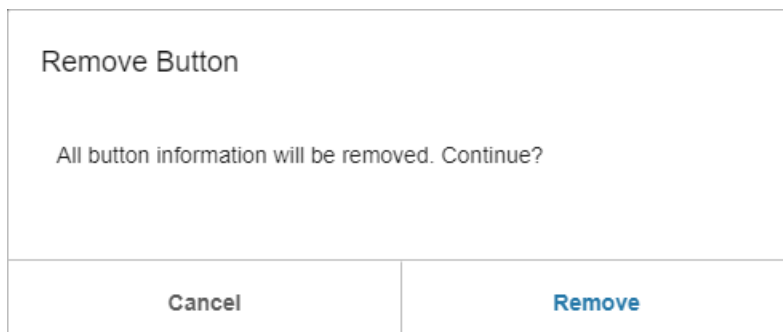
Remove a Widget Button

If you wish to remove the Widget Button, select the Button field with the left mouse button and then select the *Buttons – Remove Button* menu item or, press the right mouse when the mouse is over the field and select *Remove Button* from the context menu. You will be prompted to confirm the action, e.g.

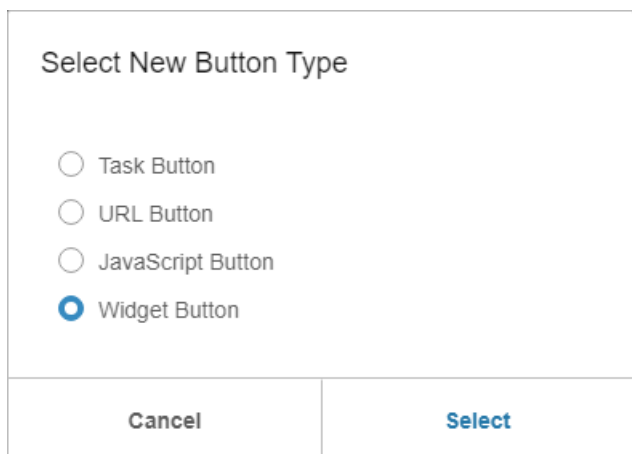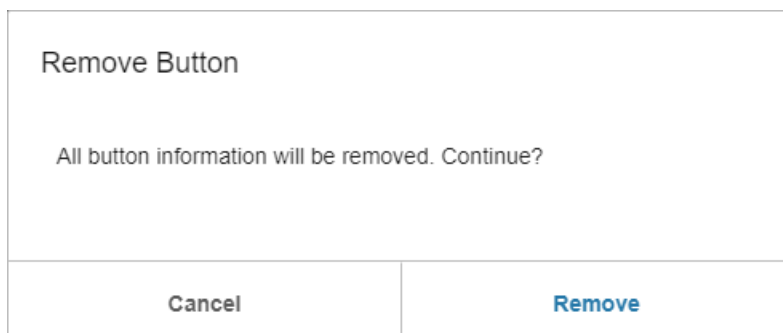Select *Remove* to remove the Button or *Cancel* to keep it.

Add an OK Button

Users that are familiar to using Microsoft Windows will be used to having an OK Button to represent the action of pressing Enter on the keyboard to accept their changes. Many IBM i application screens do not display an "Enter = OK" button/action but still accept the Enter key as a valid action. For these screens, you can use Designer to automatically add an OK Button.

To add an OK Button to the screen, select the *Screen – Show OK Button* menu option. The OK Button will be added to the screen.

The *Screen – Show OK Button* option will not be available if you have added a Next Button to the screen.

You can move the OK Button to any position on the screen and perform any valid button actions upon it.

If Button Compression is enabled, the OK button will always appear as the first selectable button, e.g.
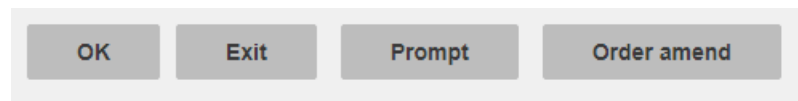
The OK Button text will be appropriately translated for non-English languages

To remove the OK Button, select the *Screen – Remove OK Button* menu option. The OK Button will be removed from the screen.

Add a Next Button

Users that are familiar to using Microsoft Windows will be used to having a Next Button to represent the action of pressing Enter on the keyboard to accept their changes and moving to the next screen of the program. Many IBM i application screens do not display an "Enter = Next" button/action but still accept the Enter key as a valid action to move to the next screen of the IBM i application. For these screens, you can use Designer to automatically add a Next Button.

To add a Next Button to the screen, select the *Screen – Show Next Button* menu option. The Next Button will be added to the screen.

The *Screen – Show Next Button* option will not be available if you have added an OK Button to the screen.

You can move the Next Button to any position on the screen and perform any valid button actions upon it.

If Button Compression is enabled, the Next button will always appear as the first selectable button, e.g.
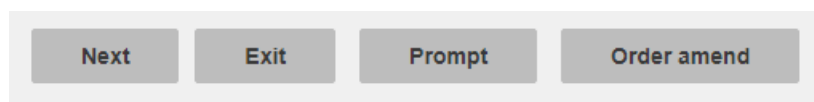
The Next Button text will be appropriately translated for non-English languages.

To remove the Next Button, select the *Screen – Remove Next Button* menu option. The Next Button will be removed from the screen.

Chapter 4   Advanced Features

The Tables Menu

Define a Table for Export

Many Infor ERP IBM i applications contain tabulated areas of data (also known as sub-files). Designer allows you to define an area of an application screen as a Table so that users can view the data laid out in rows and columns within a grid UI control and export data from the Table into other Windows applications. At run-time, the data is read row-by-row from the screen into one or more Columns. The Export facility automatically navigates through the Table, retrieving page after page of data based on the settings defined in Designer.

> **Caution:** Before creating a Table Definition, you should try to make sure the first Row of the table is fully populated with data. This will aid the auto-detection of table columns during the creation of the table described below.

To create a Table Definition, select the *Tables – Define a Table* menu item. This will put Designer into *Define Table Mode*. In this mode, you can use the mouse to draw a rectangular area that encapsulates the Table.

If you wish to abort the *Define Table Mode* before creating a tabular area, select *Tables – Cancel Table Definition* or, press the right mouse button and select *Cancel Table Definition* from the context menu.

To draw a rectangle, press and hold the left mouse button within the application screen, and move the mouse. You will see a "rubber-band" rectangle that will track the mouse pointer, E.g.

| File ▾ | Fields ▾ | Buttons ▾ | Tables ▾ | Screen ▾ | Global ▾ | Tools ▾ | Help ▾ |

SL202   Z1 - UK Demo Company   User   RSANK3   6/04/21
                                                                                                                11:05:23

Customer Enquiry...Item Details   - All Items for All Periods   (Prime)

Account . . ?   GC01   Reeves Chemist's

Currency. . ?

Period. . . :   0000   External reference. . . . :

Position to :   Total   1508372.61-   Revalued   555997.96-

X	T	Int Ref	Doc	Original	Outstanding	P	Perd	Due	Cur
	CR	400508A	200508	117.50-	117.50-	6	0805	200508	GBP
	CT	00000002	210508	122.00-	.00	6	0805	000000	GBP
	IN	190508A	190508	1175.00	.00	6	0805	180608	GBP
	IN	200508A	200508	1292.50	.00	6	0805	190608	GBP
	IN	200508M	200508	2748.33	.00	6	0805	190608	GBP
	IN	200508U	200508	10169.63	.00	6	0805	190608	GBP
	IN	200508V	200508	17.63	.00	6	0805	190608	GBP
	IN	200508X	200508	996.40	.00	6	0805	190608	GBP
	IN	200508Y	200508	213.85	.00	6	0805	190608	GBP
	IN	230508A	230508	1175.00	1900.00-	6	0805	220608	GBP
	IN	230508U	230508	1042.23	.00			08	GB +

Start: 8,1 - End: 18,55

1=Full detail 4=Pay Status 5=All trans 6=Creation event 7=Dispute 8=Text

| Exit | Prompt | External ref | | Resequence | Previous |

| Open items | | More |

As you move the mouse, a badge control is placed next to the mouse cursor showing the cell row and column that the mouse button was first pressed in (labelled Start), and the cell row and column that the bottom-right corner of the rubber-band area is currently on (labelled End).

Within the rectangle, you should encapsulate any Column Heading rows that you want including as part of the table (Column Headings are not compulsory).

When you are happy with the size and position of the rectangle, release the mouse button. The *Define Table Properties, Table Structure* dialog will appear, e.g.

The *Top*, *Left*, *Bottom* and *Right* fields define the table area. *Top* and *Bottom* values can be in the range 0 to screen height minus one. The *Left* and *Right* field values can be in the range 0 to screen width minus one. You can enter a numeric value within the range (or use the spinner control attached to the field) to alter the value.

In the *Number of Rows to Use as Header* field, enter (or use the spinner control) the number of screen rows within the defined area that will make up the Column Headers. Select 0 for no screen rows to be used as the header.

> **Caution:** At run-time, the table control will always have a header row. If you select 0 in the *Number of Rows to Use as Header* field, no column headings will be automatically shown using data from the screen, unless you add them via the *Define Table Properties* dialog described later in this section.

Check the *Each Table Row Uses More Than One Screen Row* field if the column data within your table spans more than one screen row. Use the numeric field to define the number of screen rows each table row will comprise of (2 or more).

Select *Cancel* to abort the table definition and return to Designer.

Select *Next* to move to the *Column Layout* screen of the *Define Table Properties* dialog. If the value of the *Each Table Row Uses More Than One Screen Row* field is not a valid multiple of the current Table height a warning will be shown, e.g.

nlbavwrsank1.infor.com:9083 says

The row height specified (2 rows) is not a valid multiple of the display row area (11 rows). Do you wish to continue?
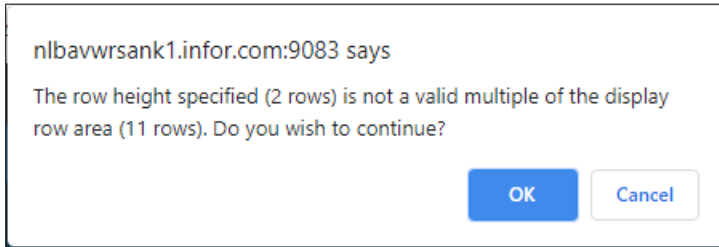
OK   Cancel

Select *OK* to move to the *Column Layout* screen of the *Define Table Properties* dialog or *Cancel* to return to the *Table Structure* screen.

The next screen of the *Define Table Properties* dialog is the *Column Layout* screen, e.g.

Define Table Properties

Step 2 of 5: Column Layout

Column Definitions   +   ✎   🗑

Column Heading	Start Column	End Column	Length
X	1	1	1
Column: 2	5	6	2
Int Ref	8	15	8
Doc	17	22	6
Original	24	40	17
Outstanding	42	58	17

Cancel	Previous	Next
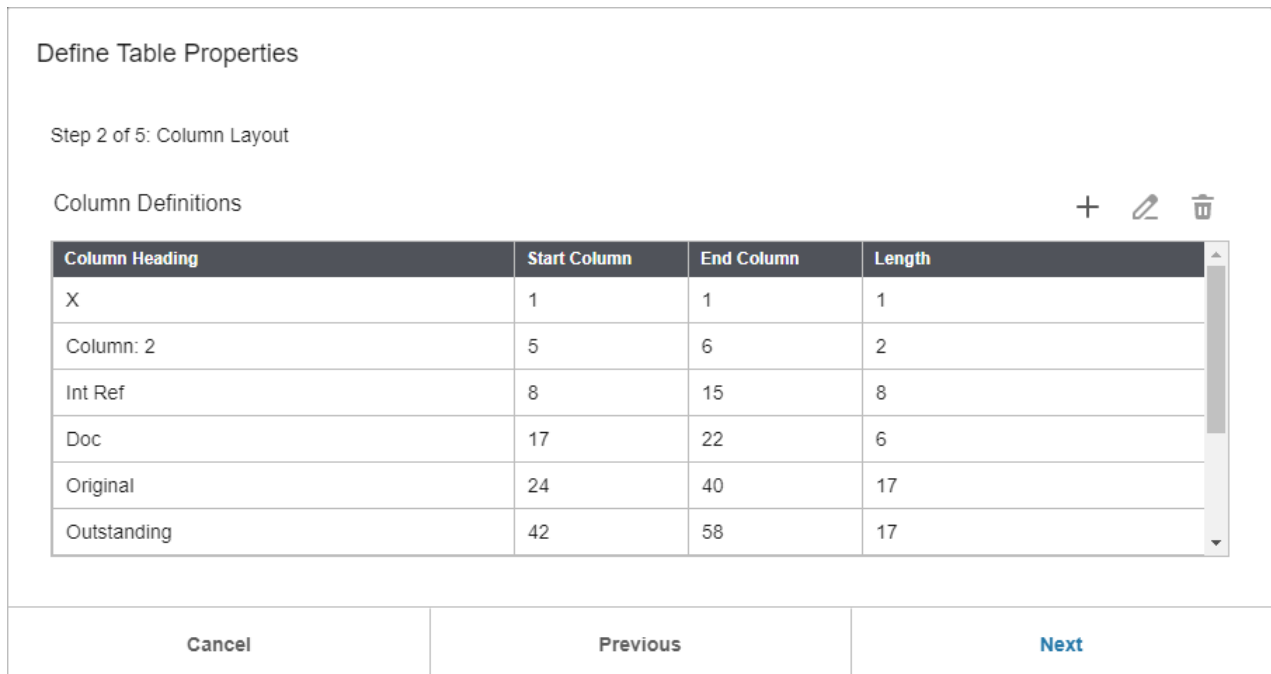
In this dialog you can define the Column layout of your table definition.

The *Define Table Properties* dialog will analyse the first row(s) of the table and attempt to determine all the Column positions automatically. These will be populated within the grid.

To edit a Column, click a row within the grid to highlight it then select *Edit Column* icon ✎ from the toolbar. The *Edit Table Column Properties* dialog will be displayed, e.g.

Use the *Column Start Position* and *Column End Position* fields to define the Column extent.

If you have checked the *Each Table Row Uses More Than One Screen Row* field on the first screen of the *Define Table Properties* dialog, you will see an extra field, *Folded Row Number*, to define which screen row this Column comes from; E.g.

The start and end points you define here should encapsulate one or more screen fields (Edit or Label).

You can identify the width of a Label or Edit Field by clicking on it within Designer and looking on the Status Bar to see the length value.

The entire content of any Edit or Label Field that has its start point between these two positions will be used to capture all field data for this column.

If multiple fields have their start points between these two positions, they will be concatenated together to form the output for this column, separated by a space.

> **Caution:** Within some legacy Infor ERP IBM i applications, table data has been written out as a single Label Field. For these types of table, the exported data cannot be split into separate columns.

Choose *Cancel* to discard the changes.

Choose *Select* to accept the changes. If the Column start or end overlaps another Column, you will see an error message, e.g.
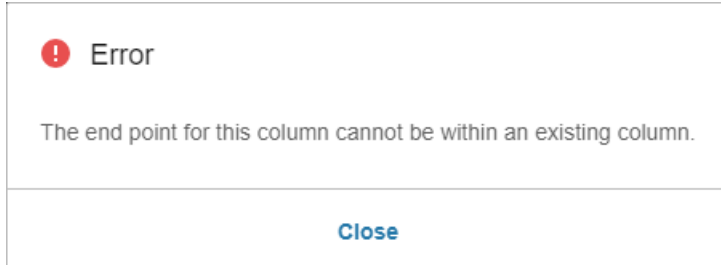
Select *Close* and adjust the Column start/end so that it no longer overlaps any other Columns.

To add a Column, click a row within the grid to highlight it then select *Add Column* icon ✚ from the toolbar. The *Edit Table Column Properties* dialog will be displayed. Enter a new start/end point for the Column that does not overlap any other.

To delete a Column definition, click a row within the grid to highlight it then select *Delete Column* icon 🗑 from the toolbar. The Column will be removed from the grid.

Select *Cancel* to abort the table definition and return to Designer.

Select *Previous* to move to the *Table Structure* screen of the *Define Table Properties* dialog.

Select *Next* to move to the *Column Format* screen of the *Define Table Properties* dialog, e.g.
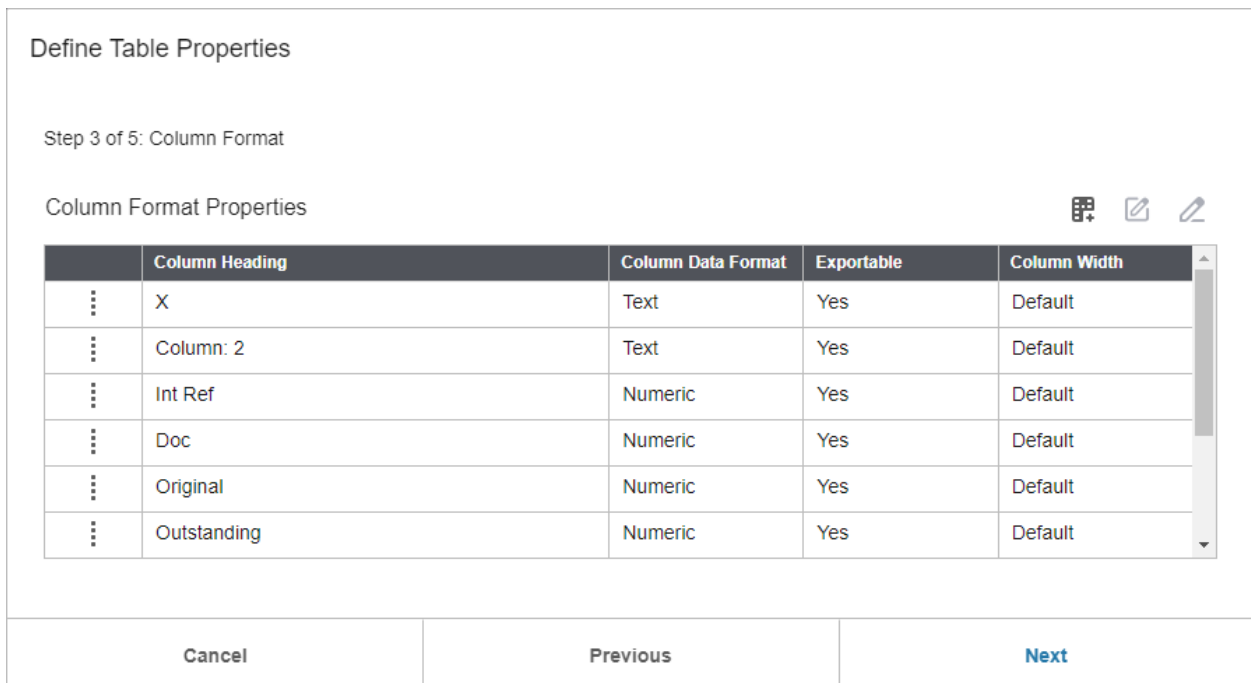
In this dialog, you can define the Column Headings, Data Format, Column Width, and initial export status for your Table definition. You can also add extra columns of data taken from a screen field or Designer Variable to be used when the table is exported.
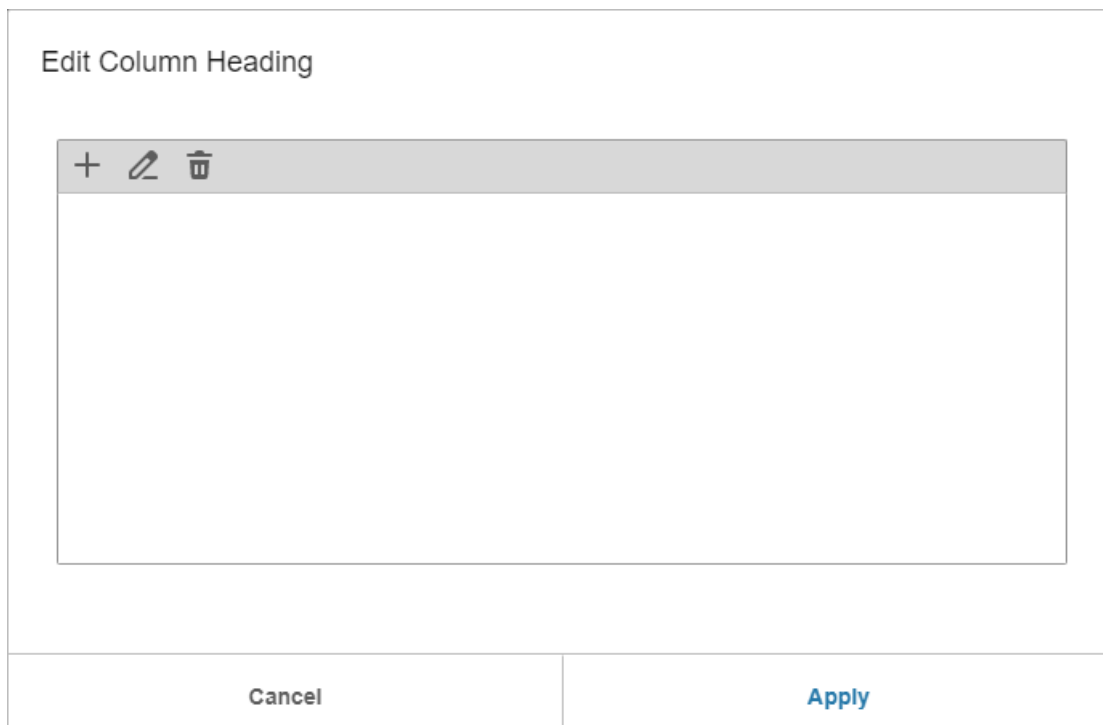
> **Caution:** If you have checked the *Each Table Row Uses More Than One Screen Row* field on the first screen of the *Define Table Properties* dialog, you will see an extra column within the grid, *Paired With*, to define column pairings for use with the 5250 AnyWhere Emulator. For more details, see the *Paired Table Columns* section.

The *Define Table Properties* dialog will analyse the first row(s) of the table and attempt to determine all the Column Data Formats automatically. These will be populated within the grid.

To change the order of the columns within the grid, press and hold down your mouse button on the ⋮ icon in the first column of the grid, drag the row to the new location, then release the mouse button to assign it to that position within the grid. The order will be saved and re-applied if the Table Properties are edited.

> **Caution:** Changes to the column order are only applied within the 5250 AnyWhere Emulator user interface.

To alter the Column Heading, click a row within the grid to highlight it then select the *Edit Column Heading* icon ✎ from the toolbar. The *Edit Column Heading* dialog will be displayed, e.g.
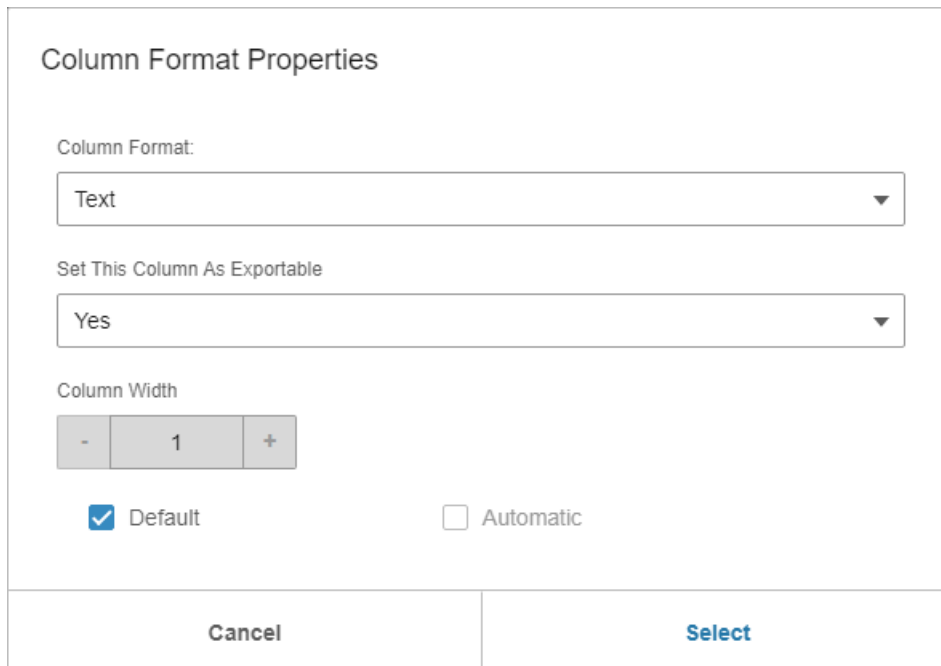
Edit Column Heading

+ ✎ 🗑

Cancel   **Apply**

Assign the Column Heading a label as you would for any other Edit or Label text override (see the Changing Label/Edit Field Text section for more details). Select *Apply* to accept the new header text or *Cancel* to discard it.

By default, the Column Heading will be read from the screen dynamically. If you override the Column Heading, the grid will show the description appropriate to the current Infor System I Workspace AnyWhere locale you are using.

To alter the Column Format and/or other settings, click a row within the grid to highlight it then select the *Edit Column Format Properties* icon 🖉 from the toolbar. The *Column Format Properties* dialog will be displayed, e.g.

Column Format Properties

Column Format:

Text ▾

Set This Column As Exportable

Yes ▾

Column Width

-	1	+

☑ Default   ☐ Automatic

Cancel	Select

Caution: If you have checked the *Each Table Row Uses More Than One Screen Row* field on the first screen of the *Define Table Properties* dialog, you will see an extra field within the grid, *Paired Column*, to define column pairings for use with the 5250 AnyWhere Emulator. For more details, see the *Paired Table Columns* section.

Use the *Column Format* field to define the data format of the column's content. The *Column Format* can be *Text*, *Numeric* or *Date*. This setting will determine how the data is automatically aligned within the column (*Numeric* and *Date* data will be right-aligned, *Text* will be left-aligned) and also which filters can be applied to this column's exportable data at run-time.

Use the *Set This Column as Exportable* field to set the default export status of this Column. The three options are *Yes*, *No* and *Never* This status can be overridden at run-time by the user, unless set to *Never,* in which case the data will not be available in the export results at runtime.

The *Column Width*, *Default* and *Automatic* fields can be used to override the display width of the table column.

When the *Default* field is checked, the *Column Width* and *Automatic* fields will be disabled and the width of a column will be determined by using the difference between the start and end positions of the column, and then multiplying this by an average character width value, plus some padding.

However, in some cases, the column heading may be constructed by concatenating several label fields together, whose length then exceeds the standard column width. In this instance, the *Column Width* field can be used to change the display width of the column within the 5250 AnyWhere Emulator.

To set a fixed width value within the *Column Width* field, uncheck the *Default* field and use the numeric spin control to set a positive integer value to calculate the column width at run-time.

To use the width of the Column Heading's text to calculate the column width automatically at run-time, uncheck the *Default* field and check the *Automatic* field.

> **Caution:** If the column width is set to a smaller size than the width of the column's content, the content may be clipped or become unreadable.

Choose *Select* to accept the new Column Format properties or *Cancel* to discard them.

The grid within *Define Table Properties* dialog will be updated to reflect any changes you make.

A Field Data Export Column can be used to add extra columns of data that are included when the table is exported at run-time.

To add a Field Data Export Column, select the *Field Data Export Column* icon from the toolbar. The *Column Format Properties* dialog will be displayed, e.g.

Column Format Properties

Select Field

Input Field Row: 4 Column:15 (GC01) ▼

☐ Only use a Sub-section of the Field Value

Start Position: Sub-section Length:

-    1   +   -   1   +

Column Format:

Text ▼

Cancel	Add

Use the *Select Field* drop-down to choose which Input or Output field from the current screen, or Designer Variable, will be used to populate the column data. By checking the *Only use a Sub-section of the Field Value* you can control the start position and size of the data that is added into the

Field Data Export Column via the *Start Position* and *Sub-section Length* fields, or leave unchecked to use the field's entire content.

Use the *Column Format* field to define the data format of the column's content. The *Column Format* can be *Text*, *Numeric* or *Date*.

Select *Cancel* to abort the Field Data Export Column definition.

Select *Add* to continue onto the *Edit Column Heading* dialog where you can define one or more Column Headings in multiple locales. This dialog is the same as the one described for other table columns above, except that for a Field Data Export Column, you must enter at least one Column Heading value.

Clicking *Apply* in the *Edit Column Heading* dialog will add the Field Data Export Column to the end of the grid within *Define Table Properties* dialog. You can re-position the Field Data Export Column order within the grid as you can with any other column, by dragging the row up or down via the icon handle in the first column.

Selecting the Field Data Export Column in the grid and selecting the *Edit Column Heading* or *Edit Column Format Properties* icons will open the respective dialog to change its properties.

> **Caution:** Field Data Export Columns are not displayed within the table UI at design or run-time.

Select *Cancel* to abort the table definition and return to Designer.

Select *Previous* to move to the *Column Layout* screen of the *Define Table Properties* dialog.

Select *Next* to move to the *Export Properties* screen of the *Define Table Properties* dialog, e.g.

Define Table Properties

Step 4 of 5: Export Properties

☐ Navigate To Top Of Table Before Exporting Data

☐ Limit The Number Of Rows To Retrieve

| - | 1 | + |

☐ Use An Indicator Character To Denote End-Of-Table

Name For This Table:

Table (8 1) to (19 77)

| Cancel | Previous | Next |

Check the *Navigate to Top of Table before Exporting Data* field to force the export process for this table to "page up" to the first record of data before reading records from the application screen at run-time.

Check the *Limit the Number of Rows to Retrieve* field to set a maximum number of row records to read from the application screen at run-time. When checked, use the numeric field to set the number of rows to retrieve. You might choose to do this if you have multiple users exporting from the same table causing a performance issue.

Check the *Use An Indicator Character To Denote End-Of-Table* field if you wish to use a text field to indicate to the Table Export that the end of the table has been reached. You can select the indicator once you've completed the Table Wizard (see the *Setting an End-Of-Table Indicator* section).

In the *Name for This Table* field, set a unique name for this table. Table selection and user preference settings are stored using this name so you should not use the same name multiple times (e.g. Use "Open Item Enquiry Results" instead of "Table 1").

Select *Cancel* to abort the table definition and return to Designer.

Select *Previous* to move to the *Column Format* screen of the *Define Table Properties* dialog.

Select *Next* to move to the *Display Properties* screen of the *Define Table Properties* dialog, e.g.

Define Table Properties

Step 5 of 5: Display Properties

☐ Alternate Row Background Fill Colour

☐ Fill First Column With Header Background Colour

Cancel	Previous	**Finish**

Check the *Alternate Row Background Fill Colour* field to enable alternating background shade colours for each Table row, e.g.

X	Text	Int Ref	Doc	Original	Outstanding	P	Perd	Due	Cur
☐		IN 0001137D	080107	1450.31	.00	6	0908	150207	GBP
☐		IN 0001138A	080107	4400.00	.00	6	0908	150207	GBP
☐		IN 0001138B	080107	3300.00	.00	6	0908	150307	GBP
☐		IN 0001138C	080107	3300.00	.00	6	0908	150407	GBP
☐		IN 0001138D	080107	1876.88	.00	6	0908	150207	GBP

Check the *Fill First Column With Header Background Colour* field to shade the first column with the header colour; E.g.

X	Text	Int Ref	Doc	Original	Outstanding	P	Perd	Due	Cur
☐		IN 0001137D	080107	1450.31	.00	6	0908	150207	GBP
☐		IN 0001138A	080107	4400.00	.00	6	0908	150207	GBP
☐		IN 0001138B	080107	3300.00	.00	6	0908	150307	GBP
☐		IN 0001138C	080107	3300.00	.00	6	0908	150407	GBP

You can combine any of these fields to display tabulated areas in the style that you find most suitable, e.g. with all fields in the *Display Properties* screen enabled…

X	Text	Int Ref	Doc	Original	Outstanding	P	Perd	Due	Cur
☐		IN 0001137D	080107	1450.31	.00	6	0908	150207	GBP
☐		IN 0001138A	080107	4400.00	.00	6	0908	150207	GBP
☐		IN 0001138B	080107	3300.00	.00	6	0908	150307	GBP
☐		IN 0001138C	080107	3300.00	.00	6	0908	150407	GBP
☐		IN 0001138D	080107	1876.88	.00	6	0908	150207	GBP

Select *Cancel* to abort the table definition and return to Designer.

Select *Previous* to move to the *Export Properties* screen of the *Define Table Properties* dialog.

Select *Finish* to apply this Table definition to your screen design and see the results, e.g.

| File ▼ | Fields ▼ | Buttons ▼ | Tables ▼ | Screen ▼ | Global ▼ | Tools ▼ | Help ▼ |

SL202   Z1 - UK Demo Company   User   RSANK3   6/04/21
                                                                       13:46:28

Customer Enquiry...Item Details   - All Items for All Periods   (Prime)

Account . . ?   GC01   Reeves Chemist's

Currency. . ?

Period. . . :   0000   External reference. . . . :

Position to :   Total   1508372.61-   Revalued   555997.96-

X		Int Ref	Doc	Original	Outstanding	P	Perd	Due	Cur
☐	IN	B000376	130716	90.00	90.00	6	2001	120816	GBP
☐	IN	B000378	130716	90.00	90.00	6	2001	120816	GBP
☐	IN	B000380	150716	72.00	72.00	6	2001	140816	GBP
☐	IN	B000381	190716	1.20	1.20	6	2001	180816	GBP
☐	IN	B000382	250716	144.00	144.00	6	2001	240816	GBP
☐	IN	B000384	270716	1728.00	1728.00	6	2001	260816	GBP
☐	IN	B000445	091116	267.24	267.24	6	2001	091216	GBP
☐	IN	B000578	020519	17.56	17.56		2001	010619	GBP
☐	UC	20001195	101120	1000.00-	1000.00-		2003	101120	GBP
☐	CR	5000377	031120	351.00-	351.00-		2012	031120	GBP
☐	IN	EI000219	211220	4800.00	4800.00		2012	200121	GB +

1=Full detail 4=Pay Status 5=All trans 6=Creation event 7=Dispute 8=Text

Exit	Prompt	External ref		Resequence	Previous

| Open items | | More |

Caution: Once a Table definition has been applied, any fields within the Table's columns cannot then be dragged in/out of the table, or to a different position or column within the table. Reorganization of the fields must be carried out before the Table is defined. You can however select them (or select multiple fields within the Table) and change their properties.

Caution: A dashed orange rectangular area is drawn onto the design canvas to show the screen area that the table is set around. In practice, this is usually mostly hidden by the Table's Data Grid control which will be larger than the defined area due to column/row padding. The Table Data Grid is displayed as it will appear at run-time.

You can define multiple Tables within a single application screen.

When one or more Table definitions exist, you can alter them using the *Tables – Edit Table Definition* option from the menu. If there is only a single Table definition for the current application screen, you will be taken to the first screen of the *Define Table Properties* dialog. If there is more than one definition, you will be prompted to select the Table definition you wish to edit, e.g.

Edit Table Definition

Select the table definition to be edited:

Table (8 1) to (19 77) ▼

Cancel	Select

In the *Select the table definition to be edited* drop-down list, select the Table you wish to edit. Choose *Select* and you will be taken to the first screen of the *Define Table Properties* dialog. Choose *Cancel* to abort the edit.

The *Table Structure* screen of the *Define Table Properties* dialog has an extra field when an existing table is being edited, e.g.

Define Table Properties

Step 1 of 5: Table Structure

Start Position:

Top			Left		
-	8	+	-	1	+

End Position:

Bottom			Right		
-	19	+	-	78	+

Number Of Rows To Use As Header:

-	1	+

☐ Each Table Row Uses More Than One Screen Row:

-	2	+

☐ Re-analyse columns

Cancel	Previous	Next

If the *Re-analyse columns* field is checked, then when you click *Next,* the columns in your table will be re-analysed from the display and any existing Column layout modifications you have made will be lost.

If the columns within the *Column Layout* screen are re-defined (i.e. columns are fully re-analysed, or individually added/removed), any modifications within the *Column Format* screen will be lost when **Next** is selected.

If existing columns within the *Column Layout* screen are changed, then when you move to the *Column Format* screen, you will see the following message…

nlbavwrsank1.infor.com:9083 says

One or more column definitions have changed, do you want to re-analyse the column types?

OK   Cancel

Click *OK* to re-analyse the Column formats (which will clear any existing settings).

Click *Cancel* to retain the existing Column formats.

At run-time, when a Table definition has been applied to an Infor ERP IBM i application screen using Designer, you will see the Export to a Microsoft Excel Workbook button 📊 on the 5250 AnyWhere Emulator's Toolbar. Select this button to begin the export process.

If there is more than one Table definition, you will be prompted to select the Table definition you wish to Export, e.g.
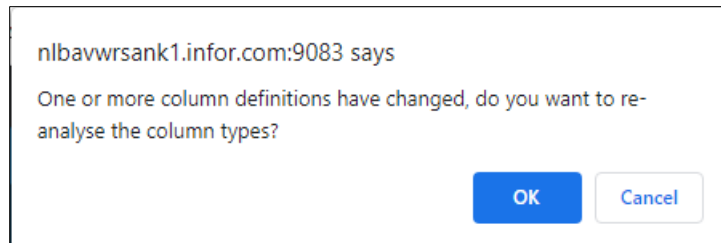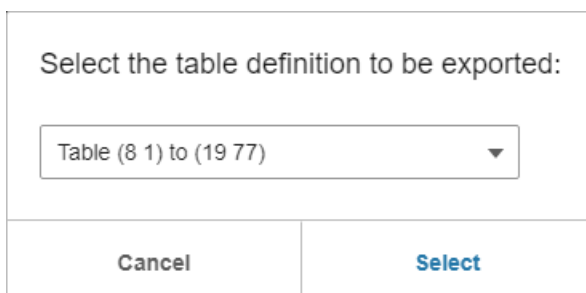
Select the table definition to be exported:

Table (8 1) to (19 77)   ▼

Cancel   Select

In the *Select the table definition to be removed* drop-down list, select the Table definition you wish to Export data from. Choose *Select* to export from the selected Table. Select *Cancel* to abort the export.

Input to the current application screen will be suspended and a progress dialog will be shown, E.g.
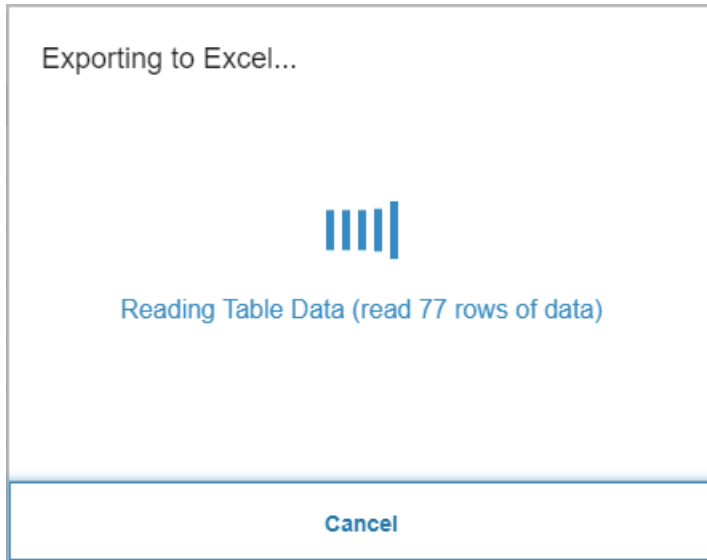
Select *Cancel* to abort the reading of table data and show the rows retrieved so far or wait until the Export process has read all the Table data.

As long one or more rows of data are retrieved, the *Export Data* dialog will be shown, e.g.

See the Infor System I Workspace AnyWhere Product guide for more information on using this interface and the alternate export formats that are available.

Removing a Table Definition
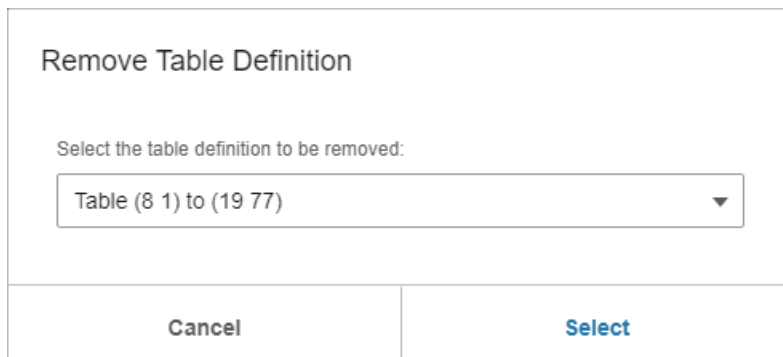
When one or more Table definitions exist, you can remove them using the *Tables – Remove Table Definition* option from the menu. If there is only a single Table definition for the current application screen, you will be prompted, e.g.

Remove Table Definition

Are you sure you want to remove this table definition?

Cancel   **Remove**

Select *Remove* to confirm the removal of the Table definition. Select *Cancel* to abort the removal.

If there is more than one Table definition, you will be prompted to select the Table definition you wish to remove, e.g.

Remove Table Definition

Select the table definition to be removed:

Table (8 1) to (19 77)   ▼

Cancel   **Select**

In the *Select the table definition to be removed* drop-down list, select the Table definition you wish to remove. Choose *Select* to remove the selected Table. Select *Cancel* to abort the removal. The *Remove Table Definition* confirmation dialog will be displayed as above.

Setting an End-Of-Table Indicator

Many Infor ERP applications use an indicator to denote that you can page down within a sub-file to get more data. This is often in the form of the "+" character or the word "More…", e.g. as highlighted in the red circle…

When page down will not produce any more records, the indicator field is either cleared or changed.

If you've checked the *Use An Indicator Character To Denote End-Of-Table* field in the *Define Table Properties* dialog, then you need to identify within Designer this indicator field.

First, outside Designer, make sure that within the screen you wish to design, that the indicator is shown and contains the character or word that means there is more data within the sub-file (e.g. the "+" character or the word "More…" is visible).

To identify the field as being an indicator for the Table Export, select the Label or Edit Field with the left mouse button and then select the *Fields – Use As End-Of-Table Indicator* menu item or, press the right mouse when the mouse is over the field and select *Use As End-Of-Table Indicator* from the context menu.

If there is more than one area of the screen marked for Table Export, you will be presented with a dialog to select the specific table you wish to associate the indicator with.

The following message dialog will be displayed…

Use An Indicator Character To Denote End-Of-Table

The Table Export for Table (8 1) to (19 77) will page down until the Indicator at 19,78 is no longer set to the value +

Use this field as the end-of-table Indicator?

Cancel   **Continue**

To use this field as the indicator, select *Continue*.

To abort this action, select *Cancel*.

This field will now be used at run-time to detect the "end-of-table" when the user performs an Export.

Fully Populating a Table for Design

The IBM i application screen you are designing may contain a Table (or sub-file) that is not currently fully-populated (e.g. the Table can contain ten rows of data, but only a few rows of data are actually displayed at run-time), e.g.

| | | SL202 | | Z1 - UK Demo Company | | | User | RSANK3 | 6/04/21 |
| | | | | | | | | | 13:37:56 |

Customer Enquiry...Item Details — All Items for All Periods (Prime)

Account . . ? GC01 Reeves Chemist's

Currency. . ?

Period. . . : 0000 External reference. . . . :

Position to : Total 1508372.61- Revalued 555997.96-

X		Int Ref	Doc	Original	Outstanding	P	Perd	Due	Cur
	IN	EI000220	211220	4800.00	4800.00		2012	200121	GBP
	IN	EI000221	221220	4800.00	4800.00		2012	210121	GBP
	IN	0004205	031120	351.00	351.00		2012	031220	GBP

1=Full detail 4=Pay Status 5=All trans 6=Creation event 7=Dispute 8=Text

Exit	Prompt	External ref	Resequence	Previous

Open items	More

Designer provides an option to add fields to the design-time screen. You can then apply design changes to these fields that will be activated when the sub-file does contain more records at run-time.

To fully-populate a sub-file, select the *Tables – Fully Populate Table with Fields* menu item.

You must have defined at least one Table within Designer for this option to become available.

If there is more than one Table definition, you will be prompted to select the Table definition you wish to apply the Fully-Populate to, e.g.

Fully-Populate Table With Fields

Select the table definition to be edited:

Table (8 1) to (19 77)	▼

Cancel	Select

In the *Select the table definition to be edited* drop-down list, select the Table definition you wish to fully-populate. Choose *Select* to populate the selected Table. Choose *Cancel* to abort the population process.

The Table will be automatically populated with *Table Place Holder* fields, e.g.

File ▼	Fields ▼	Buttons ▼	Tables ▼	Screen ▼	Global ▼	Tools ▼	Help ▼

SL202   Z1 - UK Demo Company   User   RSANK3   6/04/21
      13:37:56

Customer Enquiry...Item Details   - All Items for All Periods   (Prime)

Account . . ? GC01 Reeves Chemist's

Currency. . ?

Period. . . : 0000 External reference. . . . :

Position to : Total 1508372.61- Revalued 555997.96-

X		Int Ref	Doc	Original	Outstanding	P	Perd	Due	Cur
	IN	EI000220	211220	4800.00	4800.00	9	2012	200121	GBP
	IN	EI000221	221220	4800.00	4800.00	9	2012	210121	GBP
	IN	0004205	031120	351.00	351.00	9	2012	031220	GBP
9	99	99999999	999999	99999999999999999	99999999999999999	9	9999	999999	999
9	99	99999999	999999	99999999999999999	99999999999999999	9	9999	999999	999
9	99	99999999	999999	99999999999999999	99999999999999999	9	9999	999999	999
9	99	99999999	999999	99999999999999999	99999999999999999	9	9999	999999	999
9	99	99999999	999999	99999999999999999	99999999999999999	9	9999	999999	999
9	99	99999999	999999	99999999999999999	99999999999999999	9	9999	999999	999
9	99	99999999	999999	99999999999999999	99999999999999999	9	9999	999999	999
9	99	99999999	999999	99999999999999999	99999999999999999	9	9999	999999	999
9	99	99999999	999999	99999999999999999	99999999999999999	9	9999	999999	999

1=Full detail 4=Pay Status 5=All trans 6=Creation event 7=Dispute 8=Text

Exit	Prompt	External ref	Resequence	Previous
Open items	More			

The Table Place Holder fields contain the number nine, repeated to the length of the field, to help make the field more recognisable as being temporary.

Designer will never create a Table Place Holder field if there is an existing field at the same location.

When you select a Table Place Holder field, Designer's Status Widget will show the field type, e.g. for Label fields…

Status

Field Type:

Table Place Holder - Output (12,5)

Field Position: Field Length:

12,5   2

Selected Fields:

1

For Edit fields…

Status

Field Type:

Table Place Holder - Input (18,1)

Field Position: Field Length:

18,1   1

Selected Fields:

1

The *Fully Populate Table with Fields* option uses a 2-pass process to work out which Table Place Holder fields to create.

The first pass uses the first row of data (which can be one or more physical rows on the screen). If a field exists in the first row, a Table Place Holder field is created on any row where that field is missing.

The second pass uses the Table Column definitions to fill in any missing gaps.

To get the best results from this option, you should try to ensure the first row of the Table definition contains every possible data value available. If this is not possible, then make sure that your Table Column definitions are accurate. Failure to do this may mean that the Table Place Holder field is created at a position that will never be used at run-time so any design changes you make will not be applied. This issue will not cause any functional problem to the IBM i application, but it may be confusing to users if the UI is inconsistent.

You may alter the Table Place Holder fields as you would any other Label or Edit field within Designer. Any changes you make to the Table Place Holder fields will be saved into the design data for the screen and applied at run-time when the Table contains more rows.

When you exit Designer, the Table Place Holder fields are removed.

> **Caution:** You can only use this option once per design session.

Paired Table Columns

By default, Table Export definitions that have data rows that span more than one screen line (sometimes known as Folded tables) will be displayed as one continuous row in the 5250 AnyWhere Emulator Data Grid, e.g.

To correctly wrap the lines within the 5250 AnyWhere Emulator Data Grid control, a *Paired With* column option is available within the Designer Table Wizard, e.g. the *Column Format* step of the *Define Table Properties* dialog…

Define Table Properties

Step 3 of 5: Column Format

Column Format Properties

	Column Heading	Column Data Format	Exportable	Column Width	Paired With
⋮	Due date	Date	Yes	Default	
⋮	Customer/Supplier	Text	Yes	Default	
⋮	Reserved	Numeric	Yes	Default	
⋮	Available	Numeric	Yes	Default	
⋮	Outstanding	Numeric	Yes	Default	
⋮	Expected	Numeric	Yes	Default	

Cancel	Previous	Next

Using the *Paired With* option, column elements can be joined in logical pairs. To set a *Paired With* value, click a row within the grid to highlight it then select the *Edit Column Format Properties* icon from the toolbar. The *Column Format Properties* dialog will be displayed, e.g.

Column Format Properties

Column Format:

Numeric ▼

Set This Column As Exportable

Yes ▼

Column Width

| - | 1 | + |

☑ Default   ☐ Automatic

Paired Column:

Column: 0 (Row: 1) ▼

Cancel	Select

Use the *Paired Column* field drop-down to select which alternative column to pair with, and then click *Select*. The *Column Format* grid will be updated. Repeat the process for any other column pairings, e.g.

Define Table Properties

Step 3 of 5: Column Format

Column Format Properties

	Column Heading	Column Data Format	Exportable	Column Width	Paired With
⋮	Due date	Date	Yes	Default	
⋮	Customer/Supplier	Text	Yes	Default	
⋮	Reserved	Numeric	Yes	Default	Outstanding
⋮	Available	Numeric	Yes	Default	Expected
⋮	Outstanding	Numeric	Yes	Default	
⋮	Expected	Numeric	Yes	Default	

Cancel   Previous   Next

> **Caution:** You should normally only pair with columns below the current column i.e. column data that is normally displayed on the folded/wrapped lines of the table row. This maintains the intended data order within the IBM i application screen.

> **Caution:** You cannot pair with a Field Data Export Column.

Navigate through to the end of the *Define Table Properties* dialog and click *Finish* to immediately see the effect of pairing rows within the table at design-time, e.g.

| File ▼ | Fields ▼ | Buttons ▼ | Tables ▼ | Screen ▼ | Global ▼ | Tools ▼ | Help ▼ |

IN060   Z1 - UK Demo Company   USER   RSANK3   6/04/21
                                                                               13:49:43

Stock Availability Enquiry
Item...............   5001   Suncream Factor 4 225ml
Stockroom..........   FG   Finished Goods
Issue units.........   BX   Boxes of
Physical stock......   48423.250   In transit.....   10.000
Frozen stock........   3180.250   On order.......   23409.000
Allocated stock.....   459.000   On back order..   1.000-
Available stock.....   44784.000   Lead time (weeks)....   .00
Reserved stock......   800.000   Negativity.....   .000

	Order/Line	Typ	Due date	Customer/Supplier	Reserved / Outstanding	Available / Expected
☐	0000345/001	DS	4/06/07	Finished Goods Depot	.000	44784.000
					1.000	44785.000
☐	0000615/001	DS	11/03/11	Finished Goods Depot	.000	44784.000
					1.000	44786.000
☐	0000615/002	DS	11/03/11	Finished Goods Depot	.000	44784.000
					2.000	44788.000
☐	0000615/003	DS	11/03/11	Finished Goods Depot	.000	44784.000
					3.000	44791.000

More...

1=Reservations

| Exit | Previous | Allocations | Issue Units |

The Screen Menu

Override the White-space Setting

The ability to control the compression of white-space (i.e. change the height of rows that contain no text data to 0-pixel height) within a screen is generally under the control of the System Administrator via the Global Rules option. However, on some screens you may wish to override the default setting.

To override the default setting, select the *Screen – Override Whitespace Setting* menu item. The *Override Compress Whitespace Setting* dialog will display, e.g.

Override Compress Whitespace Setting

Define how White-space Compression will be performed on this screen:

Default ▾

Cancel   **Change**

Use the drop-down list to select how white-space compression will be performed on this application screen. The choices are…

Setting	Description
Default	No override applied.
Always compress white-space on this screen	Always apply white-space compression.
Never compress white-space on this screen	Always disable white-space compression
Always compress white-space on this screen, except in Tables and Group Boxes	Always apply white-space compression except when the empty row intersects a Table or Group Box.

Select *Change* to apply the setting or *Cancel* to discard it.

This override will not take effect until run-time.

Override the Compress Space between Buttons Setting

The ability to control the compression of buttons within a screen is generally under the control of the System Administrator via the Screen and/or Global Rules options. However, on some screens you may wish to override the default setting.

To override the default setting, select the *Screen – Override Compress Buttons Setting* menu item. The *Override Compress Buttons Setting* dialog will display, e.g.

Override Compress Buttons Setting

Define how compression of space between Buttons will be performed on this screen:

Default ▼

Cancel | Change

Use the drop-down list to select how space between buttons compression will be performed on this application screen. The choices are…

Setting	Description
Default	No override applied.
Always compress space between Buttons on this screen	Always apply button compression.
Never compress space between Buttons on this screen	Always disable button compression.
Always compress space between Program Buttons on this screen	Always apply button compression but not to any buttons added by Designer (e.g. Task/Program/URL/JavaScript buttons).

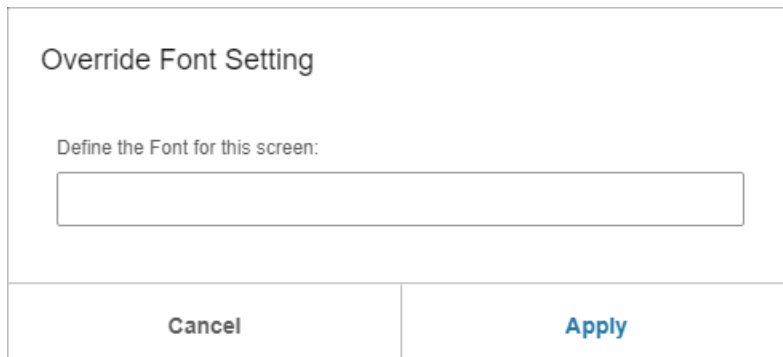Select *Change* to apply the setting or *Cancel* to discard it.

This override will not take effect until run-time.

Override the Font Setting

The ability to control the font within a screen is generally under the user's control (based on their preference), or under the control of the System Administrator via the Screen and/or Global Rules options. However, on some screens you may wish to override the default setting.

To override the user/system preference, select the *Screen – Override Font Setting* menu item. The *Override Font Setting* dialog will display, e.g.

```
Override Font Setting

Define the Font for this screen:

[                                                    ]


         Cancel          |          Apply
```

Use the *Define the Font for this screen* field to enter a valid font name (e.g. Courier New, Times New Roman, etc.) override that will be used on this application screen.

Select *Apply* to apply the font to the design or *Cancel* to discard it.

To clear an existing font override, clear the *Define the Font for this screen* field and select *Change*.

> **Caution:** If you enter a font name that is not installed on the user's PC, a system-dependant alternative will be used.

> **Caution:** The font name you enter here needs to be available on all supported client operating systems and web browsers used by your enterprise.

Override the Clipping Settings

The ability to control the top/bottom row clipping within a screen is generally under the control of the System Administrator via the Screen and/or Global Rules options. However, on some screens you may wish to override the default setting.

To override the current settings, select the *Screen – Override Row Clipping* menu item. The *Override Row Clipping* dialog will display, e.g.

Override Row Clipping

☑ Use Default

Override the user's row clipping preferences:

Clip top lines:

- 0 +

Clip bottom lines:

- 0 +

Cancel   Change

If the *Use Default* checkbox is checked, no clipping overrides will be performed (the *Clip top lines* and *Clip bottom lines* fields will be disabled).

If the *Use Default* checkbox is unchecked, you can use the *Clip top lines* and *Clip bottom lines* values to override the default setting for this application screen, e.g.

Override Row Clipping

☐ Use Default

Override the user's row clipping preferences:

Clip top lines:

- 3 +

Clip bottom lines:

- 2 +

Cancel   Change

Select *Change* to apply the setting or *Cancel* to discard it.

This override will not take effect until run-time.

Caution: If the rows you clip contain Edit Fields, be aware that you could prevent users from correctly progressing through the IBM i application screen.

Extending the Screen Area

The IBM 5250 terminal emulation standard supports two screen sizes: 80 columns by 24 rows and 132 columns by 27 rows. Designer allows you to extend any screen's area to any row/column combination between 80 and 200 columns and 24 and 60 rows.

To extend the current screen, select the *Screen – Extend Screen Area* menu item. The *Extend Screen Area* dialog will display, e.g.

Extend Screen Area

Use the edit fields below to increase the size of the design area. The design area cannot be reduced to less than the default host program's current size.

Width

| - | 80 | + |

Height

| - | 24 | + |

Use the edit field below to set the 5250 AnyWhere Emulator Font Width Adjustment (0 - 50).

Adjustment

| 0.0 |

| Cancel | **Apply** |

Use the *Width* numeric field to set the number of columns within the screen. This cannot be less than the current standard host screen width (e.g. 80 or 132).

Use the *Height* numeric field to set the number of rows within the current screen. This cannot be less than the current standard host screen height (e.g. 24 or 27).

Use the *Adjustment* decimal field to adjust the Font Width Adjustment value that applies to the 5250 AnyWhere Emulator only.

> **Caution:** See the *Font Width Adjustment* sub-section for more information about this setting and its effect on the 5250 AnyWhere Emulator display.

Click *Apply* to apply the new dimensions or *Cancel* to abort.

The dimensions of the screen are updated immediately, ready for use within Designer. Turn on the Designer grid setting to aid in seeing the new dimensions, e.g.
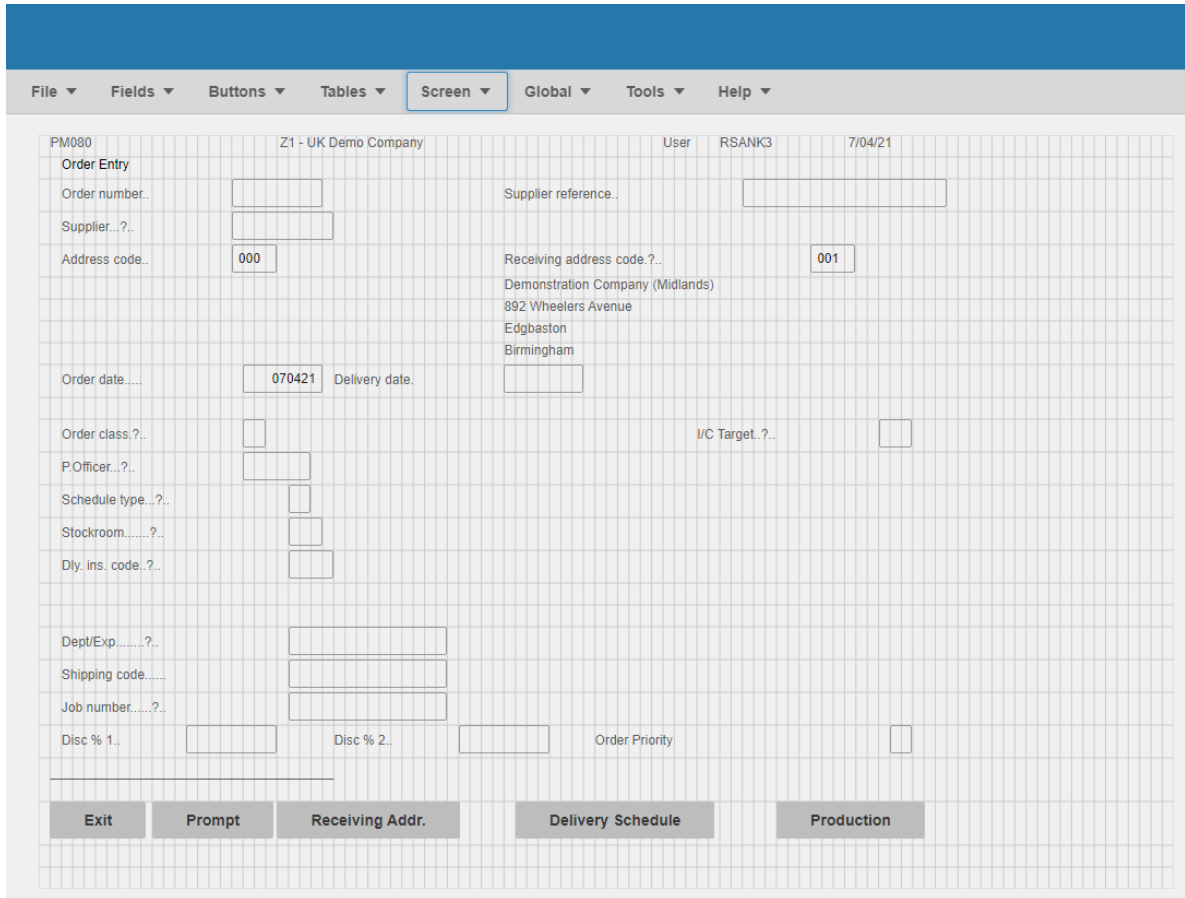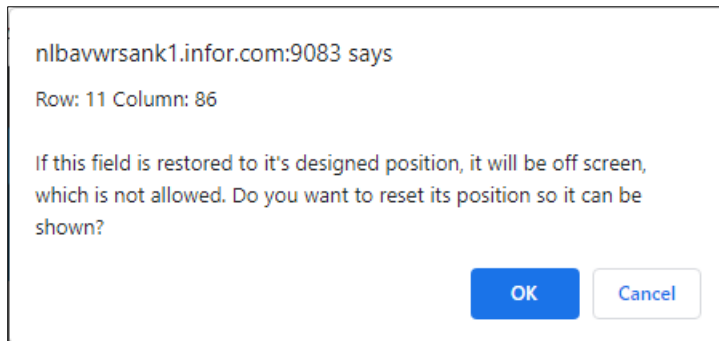
You can move or add fields into the Extended Screen Area to space out your design and give an improved UI presentation, e.g.

If you edit the Extended Screen Area and reduce the dimensions so a field, Table or Group Box will be totally obscured, you will see an Error message when you click *Apply*, e.g.

In this situation, you will not be able to apply the new smaller dimensions so you must go back to the design and move any fields from the extended portion of the screen.

Caution: When extending a screen, you need to consider the dimensions of your user's displays. Making the screen excessively wide/high could introduce scrollbars into the display for users that do not have sufficiently large displays/have a PC that supports higher display resolutions.

If you move a field into the extended area, hide it and then later restore that field, a message will be displayed, e.g.

nlbavwrsank1.infor.com:9083 says

Row: 11 Column: 86

If this field is restored to it's designed position, it will be off screen, which is not allowed. Do you want to reset its position so it can be shown?

OK   Cancel

Select *OK* to reset the position of the field.

Select *Cancel* to leave the field as hidden.

Font Width Adjustment

To preserve the layout and order of fields within the display of your IBM i application screen, the 5250 AnyWhere Emulator display is based on a grid (usually 80 columns by 24 rows or 132 columns by 27 rows). The height of each row in the grid is determined by the type of controls that occupy that row. The width of each column is defined by an average font width setting. As the display, by default, uses a proportional font, where each character in the font has a different pixel width, the 5250 AnyWhere Emulator uses an average column width value (in pixels) for the placement and sizing of fields.

On most application screens, the default average column width value is sufficient, but for some very busy application screens, such as those where labels and edit fields and packed together with no gaps, a Font Width Adjustment is required to avoid overlapping. This is a decimal value that is applied to the average column width to spread out the 5250 AnyWhere Emulator display.

By default, there is no Font Width Adjustment applied. This adjustment can be changed either via a Global Rule (so it is applied to all IBM i application screens) or to a specific application screen via the *Extending the Screen Area* option. The specific Font Width Adjustment set via the *Extending the Screen Area* option always takes precedence over the any Global Rule.

Should an overlap occur, a Font Width Adjustment of two or three pixels is usually all that is required to rectify the problem.

Caution: Changing the Font Width Adjustment increases the total width of the 5250 AnyWhere Emulator which, for larger values, may introduce a horizontal scroll bar into the display and cause information to be hidden off the screen, which may impact usability.

Pass Over a Screen

There may be some IBM i application screens that you do not wish the user to see or are not relevant to your business. Designer allows you to hide and skip these screens.

To pass over a screen, select the *Screen – Pass Over This Screen* menu item. The *Pass Over This Screen* dialog will display, e.g.

Pass Over This Screen

☐ Hide Screen

Action Key To Press To Skip Screen:

Enter ▼

Previous Screen ID:

☑ Any   ☐ Entry Point Panel

Cancel	Reset	**Change**

Check the *Hide Screen* field if you want the screen to be hidden from the user.

Select an action from the *Action Key To Press To Skip Screen* field drop-down list. Valid actions are **Enter**, **Page Up/Down** or a function key.

The *Previous Screen ID, Any and Entry Point Panel* fields allow you to condition when the screen will be passed over.

When the *Any* field is checked, the *Previous Screen ID* edit field and *Entry Point Panel* field will be disabled. At run-time, this will instruct the 5250 AnyWhere Emulator to skip this screen regardless of what the previous screen was.

When the *Entry Point Panel* field is checked, the *Previous Screen ID* edit field and *Any* field will be disabled. At run-time, this will instruct the 5250 AnyWhere Emulator to skip this screen only when it is the first screen of the application.

When both the *Any* field and *Entry Point Panel* field are unchecked, enter a screen ID (i.e. the screen will only be skipped if the magic number of the previous screen ID equals the field value you enter).

Select *Change* to apply the *Pass Over This Screen* changes.

Select *Reset* to remove any existing *Pass Over This Screen* changes.

Select *Cancel* to discard any changes.

This override setting will not take effect until run-time.

> **Caution:** If you hide a screen you should always make sure that there is a valid action key defined or the user will not be able to exit Infor System I Workspace AnyWhere correctly and could leave IBM i application records locked. The only situation where you do not need to set an action is if you intend to populate/drive the screen through using the 5250 AnyWhere Emulator's scripting functions.

If the screen is hidden and the selected action results in an error being generated, then the screen will become visible so the user can correct the problem or exit the task.

> **Caution:** Once a screen is hidden, it will no longer be available to be designed (i.e. to turn the *Pass Over This Screen* option off).
>
> To access Designer for a hidden screen, you need to edit your 5250 AnyWhere Emulator's Preferences (accessed via any non-hidden application screen) and uncheck the *Apply Designer changes* option then select *Apply*. Navigate back to the previously hidden screen to access Designer and apply any changes to the *Pass Over This Screen* dialog.
>
> Remember to re-apply design changes within your 5250 AnyWhere Emulator's Preferences once you exit Designer.

> **Caution:** When you have enabled a valid Pass Over a Screen action, on exiting Designer, the action will not be immediately applied, to allow you to re-access Designer, if needed. Once a valid action or refresh of the screen is applied, or the task is restarted, then the Pass Over a Screen function will be activated.

Ignore a Host Message

There may be error/warning messages generated by IBM i applications that are not relevant to your business or that users find irritating. Designer allows you to block these messages automatically per application screen.

To define which messages to ignore, select the *Screen – Host Messages to Ignore* menu item. The *Host Messages to Ignore* dialog will display, e.g.

Host Messages To Ignore...

+ ✎ 🗑

Cancel   **Apply**

To add a new message to be ignored on this application screen, click the *Add Message To Ignore* ➕ icon. The *Add Message To Ignore* dialog will display, e.g.

Add Message To Ignore

Locale

All Languages   ▼

Message To Ignore

Cancel   **Apply**

Use the *Locale* field to select which of the Infor System I Workspace AnyWhere locales the text applies to. If you select **All Languages** then every time a message is generated, regardless of the user's run-time language, it will be compared to the *Message To Ignore* value. If you select a specific locale, then when a message is generated it will only be compared to the *Message To Ignore* value when the user is signed in to Infor System I Workspace AnyWhere using that locale.

In the *Message To Ignore* field, enter the exact message text (including any punctuation) that is displayed when the error message occurs.

Select *Apply* to apply the message to the grid or *Cancel* to discard it.

The messages will appear in the grid, along with their associated locale, e.g.

Select *Apply* to set the messages to be ignored or *Cancel* to discard them.

This setting will not take effect until run-time.

To edit an existing Host Message To Ignore, click on the message within the grid to highlight it, then select the *Edit Message* icon from the toolbar. The *Edit Message* dialog will be displayed, e.g.

When editing an existing *Message To Ignore* value, the *Locale* field will be disabled.

To remove an existing Host Message To Ignore, click on the message within the grid to highlight it, then select the *Remove Message* icon from the toolbar.

At run-time, when the user generates an error that matches one in the messages to ignore list, it will automatically be dismissed. The user will not see any message dialog, though, depending on the error, a field, or fields, within the IBM i application screen may be highlighted or the input cursor/focus may change position.

Define Screen Replacement

The Screen Replacement feature in Designer is an alternative to using the Emulator Extensions methods and events functionality to show and programmatically drive an entirely different screen interface to replace the current IBM 5250-based application screen. You provide a URL to a HTML page that provides an alternative interface. This gives you the scope to use user interface controls and features that are not available in the Infor System I Workspace AnyWhere's 5250 AnyWhere Emulator. At runtime, the Emulator interface is automatically hidden, and the specified HTML page is shown in its place, when the corresponding screen is displayed to the user, and then the Emulator is re-shown when the screen is exited, providing a seamless integration to the end-user.

Communication between the hidden Emulator and the HTML screen is done using the exchange of JavaScript Object Notation (JSON) messages using the HTML postMessage API. This standard W3C API and method of JSON message exchange is used so that the replacement HTML screen can be hosted on a different server to Infor System I Workspace AnyWhere and not incur issues with cross-scripting, which is now forbidden in most browsers for security. A set of JavaScript helper functions are available to send these messages, along with example replacement screens, within your Infor System I Workspace AnyWhere installation in the `static\customScreens\examples` sub-folder. The structure of the JSON messages, along with a worked example, is documented within the Infor System I Workspace AnyWhere - Emulator Extensions Guide.

To show a Replacement Screen, select the *Screen – Define Replacement Screen* menu item. The *Replacement Screen URL Properties* dialog is displayed, e.g.

Replacement Screen URL Properties

URL:

https://

Parameters ＋ ▢ ✎ 🗑

Parameter Name	Value	Joined

⚠
No Data Available

Cancel   **Select**

The *URL* field is where you enter the URL for the replacement webpage. The URL does not have to reference a HTML page, it could be a Java Service Program (JSP), Servlet or any other HTTP-based technology, but it must return a result that can be embedded and displayed within a HTML IFRAME control.

The content of the *URL* field should contain the standard URL format that you would type into an Internet Browser's address field (starting with `https://` or `http://`), or it can be a relative URL (starting with either `./` or `../`) to use a HTTP source within the current Infor System I Workspace AnyWhere server deployment.

In the *Parameters* grid, you can create a list of parameters to pass into the webpage. There are three types of parameters; *Fixed Values* (i.e. hard-coded text), *Screen Fields* (i.e. values taken dynamically from the screen at run-time) and *Designer Variables* (i.e. values saved to a named storage area at runtime, these are covered in more detail in a later section). There is no limit to the number of parameters you can create. You do not have to assign parameters if none are required.

To add a Fixed Value parameter, select the *Add Fixed Value* ＋ icon from the toolbar. The *Parameter Properties* dialog will be shown, e.g.

Parameter Properties

Parameter ID:

Parameter Value:

☐ Join This Parameter With Previous One

Cancel	Change

In the *Parameter ID* field, enter the name of a URL parameter that the webpage accepts.

In the *Parameter Value* field, enter the data that you wish to pass in as a parameter. You may use substitution values here (as defined in the Substitution Parameters section in the Infor System I Workspace AnyWhere *Product Guide*). These will be resolved dynamically at run-time (e.g. a value of %{company} will be converted to the user's current Company Code at run-time and used as the parameter value).

Check the *Join This Parameter With Previous One* field to concatenate the value of this field with the preceding field in the *Parameters* grid.

Select *Change* to confirm the parameter setting or *Cancel* to discard it.

To add a Screen Field or Designer Variable parameter select *the Add Screen Field or Designer Variable* icon 🖥 from the *Parameters* grid toolbar. The *Parameter Properties* dialog will be shown, e.g.

Parameter Properties

Parameter ID:

[   ]

Parameter Value:

[Input Field Row: 3 Column:22 (1)   ▼]

☐ Join This Parameter With Previous One

☐ Only use a Sub-section of this Override Value

Start Position: Sub-section Length:

[-] [1] [+]   [-] [1] [+]

| Cancel | Change |

In the *Parameter ID* field, enter the name of a parameter that the webpage accepts.

In the *Parameter Value* field, select the input/output field from the current application screen, or a Designer Variable, that will be dynamically read at run-time and passed as a parameter to the webpage. The fields in the drop-down are listed using their host row/column position along with their current content (in brackets) to make it easier to determine which one to select.

The list also contains hidden/non-display field values.

Check the *Join This Parameter With Previous One* field to concatenate the value of this field with the preceding field in the *Parameters* grid.

Check the *Only use a Sub-section of this Parameter Value* field to elect to use only a part of the Screen Field or Designer Variable as the Parameter Value. If this is unchecked, the whole field will be used.

Use the *Start Position* numeric field to set the character position that marks the beginning of the sub-section.

Use the *Sub-section Length* numeric field to set the size of the override value sub-section.

Select *Change* to confirm the parameter setting or *Cancel* to discard it.

To edit a parameter within the *Replacement Screen URL Properties* dialog's *Parameters* grid, select any parameter in the grid to highlight it then select the *Edit* icon 🖉 from the toolbar. The appropriate *Parameter Properties* dialog will be displayed.

To change the order of the parameters, press and hold down your mouse button on the ⋮ icon in the first column of the *Parameters* grid, drag the row to the new location, then release the mouse button to assign it to that position within the grid.

To remove a parameter from the *Replacement Screen URL Properties* dialog's *Parameters* grid, select any parameter in the grid to highlight it and then select the *Remove* icon 🗑 from the toolbar. The parameter will be removed from the *Parameters* grid.

If a parameter is joined to another, then in the *Joined* column of the *Parameters* grid, a green tick will appear for that parameter row, e.g.

In the *Replacement Screen URL Properties* dialog, choose *Select* to proceed or *Cancel* to discard.

Only one Replacement Screen can be defined per-screen. To change an existing Replacement Screen, reselect the *Screen – Define Replacement Screen* option from the menu. The *Replacement Screen URL Properties* dialog will be displayed with the current URL and parameters.

Remove Screen Replacement Definition

This option will only appear within the *Screen* menu if an existing Replacement Screen is defined for the current application screen. Selecting this option will remove the Replacement Screen definition, along with any associated parameters, and at run-time, the user will once again see the standard Emulator application screen.

Define a Screen Rule

Screen Rules provide a method of making changes (which we will refer to as Actions) to the current screen based on a set of criteria (which we will refer to as Tests). Screen Rules are intended to be used by System Administrators who want to change the behavior of an IBM i program without having to write Infor System I Workspace AnyWhere extension's or create bespoke IBM i applications by making RPG ILE code changes.

To create a new Screen Rule, select the *Screen – Define Screen Rules* menu item. The *Define Rules* dialog is displayed, e.g.
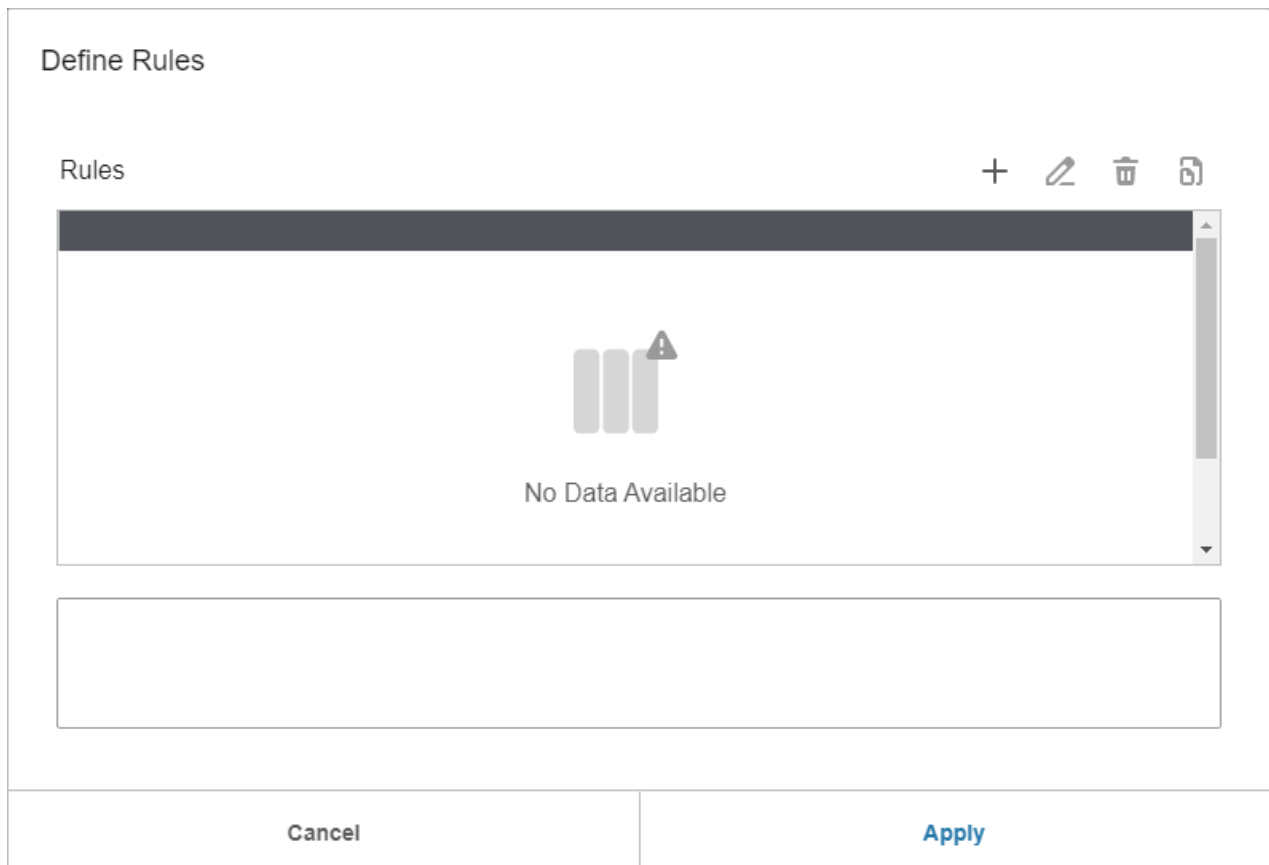
The *Rules* grid contains a list of all the Rules defined for the current application screen.

To create a new Rule, select the Add Rule icon ╋ from the toolbar. The *Edit Rule* dialog is displayed, e.g.

Edit Rule

Tests

Field	Condition	Value

Actions

Action	Field	Value

Cancel	Apply

The *Tests* grid contains the list of all the Tests defined for the current Rule.

The *Actions* grid contains the list of all the Actions defined for the current Rule.

To create a new Test, select the *Add Test* icon ╋ from the toolbar above the Tests grid. The *Edit Test* dialog is displayed, e.g.

Edit Test

Field

[▼]

Condition

[▼]

Value

[   ]   ✎

Cancel	Apply

The *Field* drop-down list field contains all the Edit, Button and Label fields within the current screen, plus any Designer Variables, along with some special options…

Option	Description
User Profile	The current Infor System I Workspace AnyWhere user profile
Language	The current Infor System I Workspace AnyWhere language
Company	The current Infor System I Workspace AnyWhere company
Environment	The current Infor System I Workspace AnyWhere environment
Role	The current Infor System I Workspace AnyWhere role code
Application	The two-character System Manager application code for the current System i application
Release	The two-character System Manager release code for the current System i application
Taskcode	The four-digit System Manager code for the current System i application
Any Output Field	Any Label or read-only Edit field within the current screen

The *Field* field forms the left-hand side of the Test equation.

The *Condition* drop-down list field contains a list of Test conditions, of which one can be selected. The available conditions are…

Condition	Description
=	The content of the selected Field is the same as the content of the Value field.
<=	The content of the selected Field is less than or equal to the content of the Value field. This condition should only be used for testing numeric and date values.
>=	The content of the selected Field is greater than or equals the content of the Value field. This condition should only be used for testing numeric and date values.
<>	The content of the selected Field is not the same as the content of the Value field.
<	The content of the selected Field is less than the content of the Value field. This condition should only be used for testing numeric and date values.
>	The content of the selected Field is greater than the content of the Value field. This condition should only be used for testing numeric and date values.
Is One Of	The content of the selected Field is exactly the same as one of the values listed in the Value field. The values in the Value fields should be separated with commas.
Is Not One Of	The content of the selected Field is not exactly the same as any of the values listed in the Value field. The values in the Value fields should be separated with commas.
Starts With	The content of the selected Field begins with the content of the Value field.
Ends With	The content of the selected Field ends with the content of the Value field.
Contains the value	The content of the selected Field contains the content of the Value field.
Matches Regular Expression	Tests the content of the selected Field against the Regular Expression defined in the Value field. Succeeds if the Regular Expression returns a positive match result.
Does Not Match Regular Expression	Tests the content of the selected Field against the Regular Expression defined in the Value field. Succeeds if the Regular Expression returns a negative match result.
Has A Numeric Value	Evaluate the Field as a numeric value. Succeeds if the Field value can be converted to an integer or decimal value.
Does Not Have A Numeric Value	Evaluate the Field as a numeric value. Succeeds if the Field value cannot be converted to an integer or decimal value.

Caution: The *Has A Numeric Value* and *Does Not Have A Numeric Value* conditions are only available when the *Field* is set to *Any Output Field*.
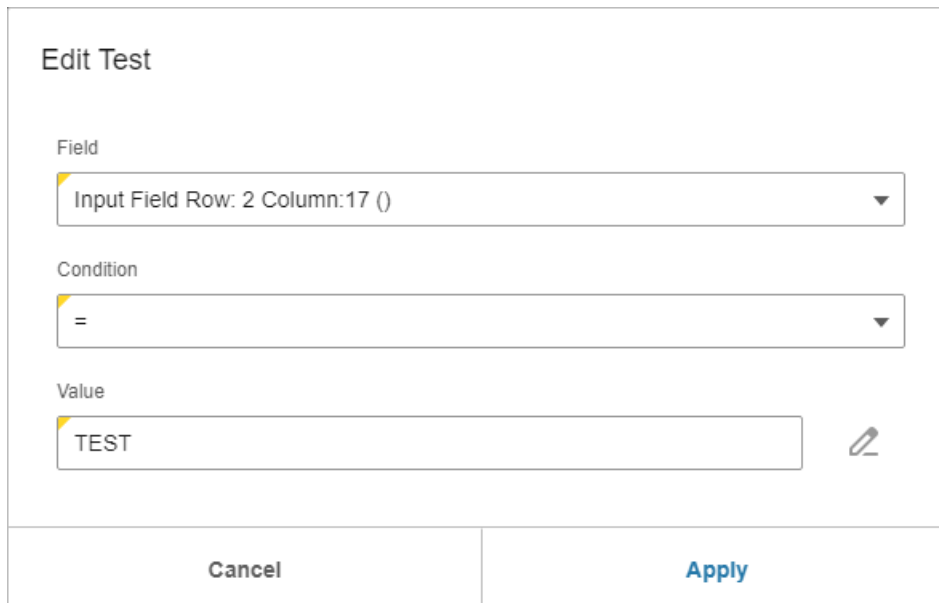
You must select a *Field* for the Condition drop-down list field to be populated.

If you select some of the special options within the *Field* field, the number of available options in the *Conditions* drop-down list will be restricted.

> **Caution:** Regular Expressions are a powerful pattern matching syntax used in many programming languages. For learning more about using Regular Expressions, we recommend the site http://www.regular-expressions.info/ which has a wealth of tutorial and reference material.

The *Value* field forms the right-hand side of the Test equation.

If you have selected a Label, Button or Edit field or Designer Variable, or the *Any Output Field* option, from the *Field* drop-down list (along with a Regular Expression Condition), the *Value* field will switch to a free-form edit field for you to enter your test value into, e.g.

Edit Test

Field

Input Field Row: 2 Column:17 ()   ▼

Condition

=   ▼

Value

TEST   ✎

Cancel	Apply

If you have selected a special option from the *Field* drop-down list (except for *Any Output Field* option), the *Value* will switch to a read-only field, where you will only be able to select a fixed value read from System i Manager or Infor System I Workspace AnyWhere, or a Designer Variable (i.e. at runtime, the *Field* will be compared to the current content of the Designer Variable), e.g.

Edit Test

Field

Language ▾

Condition

= ▾

Value

[   ] ✏

Cancel   **Apply**

If you have selected the *Any Output Field* option, from the *Field* drop-down list, along with an Is/Is Not Numeric Condition, the *Value* field will be hidden, e.g.

Edit Test

Field

Any Output Field ▾

Condition

Has a Numeric value ▾

Cancel   **Apply**

When the *Value* field is read-only, select the prompt icon ✏ to the right of the Value field to open the relevant *Select* dialog for the current *Field* selection, e.g. if the *Field* is set to *Language*, the *Select Language* dialog is displayed.

The chosen *Condition* in the *Edit Test* dialog will control whether a single or multiple options can be selected within this dialog, e.g. for a single select condition (such as = condition)...

Within the *Select* dialog, choose the item you want from the dropdown list.

Select *Apply* to use the selection or select *Cancel* to discard the changes.

For a multi-select condition (such as *Is One Of* condition) the dropdown list in Select dialog changes…

Open the *Value* dropdown list and use the checkbox fields next to each option to select/unselect multiple options.

Select *Apply* to use the selections or select *Cancel* to discard the changes.

If *Apply* was selected, the *Value* field within the *Edit Test* dialog is updated with the selection, e.g. for a single value condition…

Edit Test

Field

Language ▼

Condition

= ▼

Value

American   🖉

| Cancel | Apply |

Or, for a multiple option value condition…

Edit Test

Field

Language ▼

Condition

Is One Of ▼

Value

American, Czech, French, Italian   🖉

| Cancel | Apply |

Select *Apply* to accept this Test or select *Cancel* to discard the changes.

If a Test was created, the *Tests* grid within the *Edit Rule* dialog will be updated with the new details, e.g.
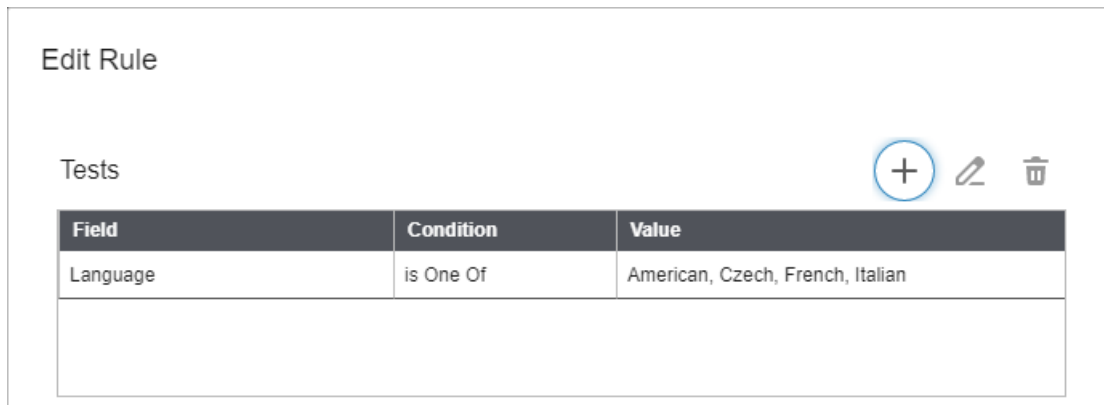
If you click on an item within the *Tests* grid, it is highlighted and a more verbose description of the Test is displayed below the grid, e.g.

At least one Test must be defined, but you can create more than one Test per Rule. Each Test must succeed for the associated Rule's Actions to be applied to the current screen.

To edit an existing Test, select the Test within the *Tests* grid and then select the *Edit Test* icon ✎ from the toolbar above the *Tests* grid. The *Edit Test* dialog will be displayed.

To remove an existing Test, select the Test within the *Tests* grid and then select the *Remove Test* icon 🗑 from the toolbar above the *Tests* grid. The Test will be removed from the grid.

To create a new Action, select the *Add Action* icon ＋ from the toolbar above the *Actions* grid. The *Edit Action* dialog is displayed, e.g.

Edit Action

Action

[▼]

Field

[▼]

Value

[   ]   ✎

| Cancel | Apply |

Select an action to apply to the screen from the *Action* drop-down list field. The available Actions are…

Action	Description
Set Field	Change the text value of a field on the current screen.
Clear Field	Change the text value of a field on the current screen to be empty.
Hide Field	Remove the field from the screen.
Show Field	Display a field that is currently hidden.
Set Field Color	Change the color of the field to one of the pre-defined system colors.
Set Field As Read-Only	Make a field non-editable.
Underline Field	Draw an underline under the field.
Show As Reverse Image	Draw the field using the Reverse Image style.
Add A Tooltip	Add a tooltip to the field.
Use Field as Window Title	Change the Window Title to the content of this field.
Set Field Alignment	Change the alignment of the field.
Add Task Button	Add a Task Button to the current screen.
Add URL Button	Add a URL Button to the current screen.
Add JavaScript Button	Add a JavaScript button to the current screen.
Publish Message to Infor Ming.le™	Define a message that will be posted to Infor Ming.le™.

Action	Description
Save To Variable	Save the selected field into a Designer Variable.
Show a button More Detail icon	Show the More Detail icon on the selected button.
Show a button Information Icon	Show an Information Icon (blue circle with white "i" in the middle) on the selected button.
Show a button Alert Icon	Show an Alert Icon (orange triangle with white exclamation mark in the middle) on the selected button.
Show a button Error Icon	Show an Error Icon (red circle with white exclamation mark in the middle) on the selected button.
Show a Widget	Display the selected Widget within the current 5250 AnyWhere Emulator page (usually to the right-side of the display).
Apply a Field Format	Apply a Global Field Format to a field, or matching fields.
Apply a Hyperlink Definition	Apply a Global Hyperlink Definition to a field, or matching fields.
Set Field From Variable	Change the text value of a field on the current screen to the content of a Designer Variable.

The content of the *Field* drop-down list will change depending on the selected *Action*.

Action	Content of Field drop-down list
Clear Field Hide Field Show Field Set Field Color Underline Field Show As Reverse Image Set Field Alignment Apply a Field Format Apply a Hyperlink Definition	A complete list of all the Edit, Button and Label fields available on the current screen, including hidden fields. The *Any Matching Output Field* option, which can be used in conjunction with the *Any Output Field* Test. Any non-editable field that matches the Test will have the selected Action applied to it.
Set Field Set Field As Read-Only Add A Tooltip Use Field as Window Title Save To Variable Set Field From Variable	A complete list of all the Edit, Button and Label fields available on the current screen, including hidden fields.

Action	Content of Field drop-down list
Add Task Button Add URL Button Add JavaScript Button	A list of row positions where the button can be created.
Show a Widget Publish Message to Infor Ming.le™	The Field drop-down list is disabled
Show a button More Detail icon Show a button Information Icon Show a button Alert Icon Show a button Error Icon	A complete list of all the Button fields available on the current screen, including hidden fields.

The format and required content of the *Value* field will change depending on the selected *Action*.

Action	Content of the Value field
Set Field	Enter the new text value to set the field to.
Clear Field	No value required.
Hide Field	No value required.
Show Field	No value required.
Set Field Color	Use the prompt button to select one of the pre-defined color values.
Set Field As Read-Only	No value required.
Underline Field	No value required.
Show As Reverse Image	No value required.
Add A Tooltip	Enter text to use as the tooltip for the selected field.
Use Field as Window Title	No value required.
Set Field Alignment	Use the prompt button to select one of the pre-defined field alignment values.
Add Task Button	Use the prompt button to define the button properties. See the Add a Task Button section for more details on using the Task Button Properties dialog.
Add URL Button	Use the prompt button to define the button properties. See the Add a URL Button section for more details on using the URL Button Properties dialog.

Action	Content of the Value field
Add JavaScript Button	Use the prompt button to define the button properties. See the Add a JavaScript Button section for more details on using the JavaScript Button Properties dialog.
Publish Message to Infor Ming.le™	Use the prompt button to define the message properties. See the Publishing Messages to Infor Ming.le™ section of the manual for more details on using Message To Publish dialog.
Save To Variable	Use the prompt button to select a variable that will be set to the value of the selected field. See the Designer Variables section of the manual for more details.
Show a button More Detail icon Show a button Information Icon Show a button Alert Icon Show a button Error Icon	No value required.
Show a Widget	Use the prompt button to select the Widget that will be displayed, along with how it can be dismissed from the display. See the Show a Widget section of the manual for more details.
Apply a Field Format	Use the prompt button to select the Field Format that will be used from a list of pre-defined and user-defined Field Formats. See the *Applying a Field Format to a Label Field* section of the manual for more details.
Apply a Hyperlink Definition	Use the prompt button to select the Hyperlink Definition that will be used from a and user-defined Hyperlink Definitions. See the *Applying a Hyperlink Definition to a Label Field* section of the manual for more details.
Set Field From Variable	Use the prompt button to select a variable that will be used to set the value of the selected field. See the Designer Variables section of the manual for more details.

When the *Value* field is read-only, select the prompt icon ✐ to open the relevant *Select* dialog for the current *Action* selection.

Here are some examples…

1) Where a user-defined override is required…

Edit Action

Action

Set Field ▾

Field

Input Field Row: 13 Column:1 () ▾

Value

Default Order 🖉

Cancel	Apply

2) Where no value is required…

Edit Action

Action

Hide Field ▾

Field

Input Field Row: 3 Column:41 (000) ▾

Cancel	Apply

3) Where the value is prompt-able…

Edit Action

Action

Set Field Colour

Field

Output Field Row: 5 Column:41 (ABC Industrial Services)

Value

Blue

Cancel   **Apply**

Select *Apply* to accept this Action or select *Cancel* to discard the changes.

If a new Action was created, the *Actions* grid within the *Edit Rule* dialog will be updated with the new details, e.g.

Actions   +   ✐   🗑

Action	Field	Value
Set Field Colour	Output Field Row: 5 Column:41 (ABC Industrial Services)	Blue

If you select an item within the *Actions* grid, it will be highlighted and a more verbose description of the Action is displayed below the grid, e.g.

Actions   +   ✐   🗑

Action	Field	Value
Set Field Colour	Output Field Row: 5 Column:41 (ABC Industrial Services)	Blue

Change the colour of output Field Row: 5 Column:41 (ABC Industrial Services) to 'Blue'.

At least one Action must be defined, but you can create more than one Action per Rule. Each Action will be performed in the order shown in the grid.

To edit an existing Action, select the Action within the *Actions* grid and then select the *Edit Action* icon ✏ from the toolbar above the *Actions* grid. The *Edit Action* dialog will be displayed.

To remove an existing Action, select the Action within the *Actions* grid and then select the *Remove Action* icon 🗑 from the toolbar above the *Actions* grid. The Action will be removed from the grid.

Select *Apply* to accept the Rule or select *Cancel* to discard any changes made within the *Edit Rule* dialog.

If you select *Apply*, and there are no entries in the *Tests* grid, you will see the following message…

🛑 **Error**

You must define at least one Test.

Close

If you select *Apply*, and there are no entries in the *Actions* grid, you will see the following message…

🛑 **Error**

You must define at least one Action.

Close
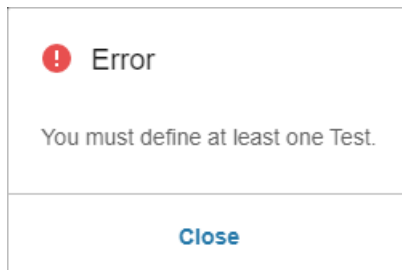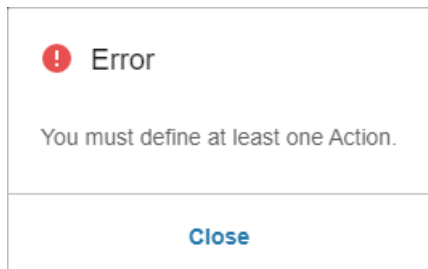
If you select *Apply*, and you have used the *Any Matching Output Field* Action but not used the *Any Output Field* Test, you will see the following message…

🛑 **Error**

You cannot use the field 'Any Matching Output Field' in an Action without using 'Any Output Field' in a Test.

Close

If you select *Apply*, and you have used the *Any Output Field* Test more than once, you will see the following message…

On successful creation of a Screen Rule, you will see the new Rule within the *Rules* grid of the *Define Rules* dialog, e.g.
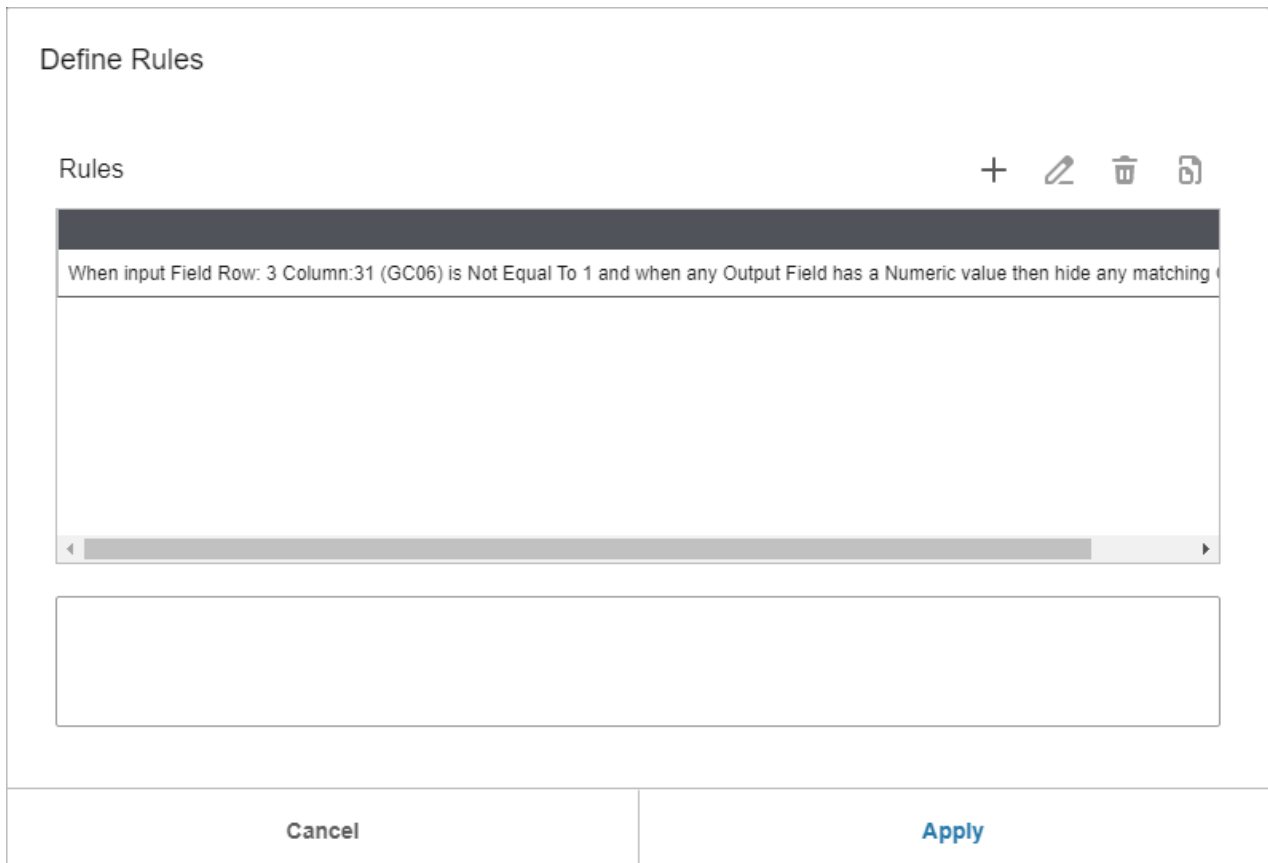
If you select an item within the *Rules* grid, a more verbose description of the Rule is displayed below the grid, e.g.

Define Rules

Rules   +   ✎   🗑   ▣

When input Field Row: 3 Column:31 (GC06) is Not Equal To 1 and when any Output Field has a Numeric value then hide any matching

When input Field Row: 3 Column:31 (GC06) is Not Equal To 1 and when any Output Field has a Numeric value then hide any matching Output Field.

Cancel	Apply

You may create as many Screen Rules as you like. They will be applied to the Screen, in the order they appear in the *Rules* grid, before it is presented to the user (e.g. if you chose to hide a field from a user, they wouldn't see the field first and then see it disappear).

To edit an existing Rule, select the Rule within the *Rules* grid and then select the *Edit Rule* icon ✎ from the toolbar above the *Rules* grid. The *Edit Rule* dialog will be displayed.

To remove an existing Rule, select the Rule within the *Rules* grid and then select the *Remove Rule* icon 🗑 from the toolbar above the *Rules* grid. The Rule will be removed from the grid.

To duplicate an existing Rule, select the Rule within the *Rules* grid and then select the *Duplicate Rule* icon ▣ from the toolbar above the *Rules* grid. The selected Rule will be duplicated within the grid. The duplicate Rule will be added to the bottom of the grid.

Select *Apply* to accept the Screen Rules or select *Cancel* to discard any changes.

Changes to the IBM i application screen by Screen Rules are only applied at run-time.

Define Custom Screen Validation

Screen Validation Rules provide a method of performing client-side checking of values entered by the user before being committed to the IBM i application. The Validation Rule can display messages and make changes (which we will refer to as Actions) to the current screen based on a set of criteria

(which we will refer to as Tests). Validation Rules are intended to be used by System Administrators who want to change the behavior of an IBM i program without having to write Infor System I Workspace AnyWhere extension's or create bespoke IBM i applications.

To create a new Validation Rule, select the *Screen – Define Screen Validation* menu item. The *Define Validation Rules* dialog is displayed, e.g.
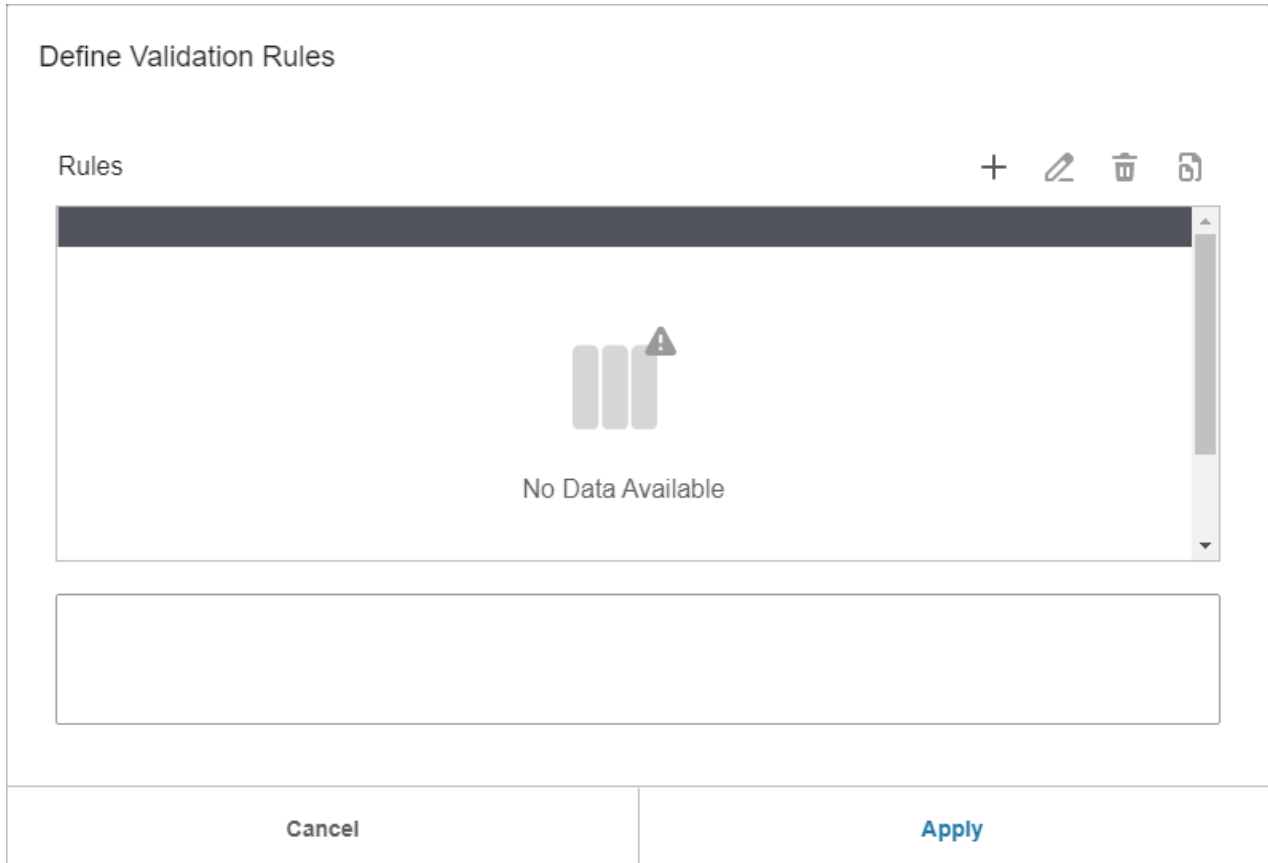
The *Rules* grid contains a list of all the Validation Rules defined for the current application screen.

To create a new Validation Rule, select the *Add Rule* icon $+$ from the toolbar. The *Edit Rule* dialog is displayed, e.g.

Edit Rule

Tests   +   ✎   🗑

Field	Condition	Value

Actions   +   ✎   🗑

Action	Field	Value

Cancel	Apply

The *Tests* grid contains the list of all the Tests defined for the current Validation Rule.

The *Actions* grid contains the list of all the Actions defined for the current Validation Rule.

To create a new Test, select the *Add Test* icon + from the toolbar above the Tests grid. The *Edit Test* dialog is displayed, e.g.

Edit Test

Field

[▼]

Condition

[▼]

Value

[   ]   ✎

| Cancel | Apply |

The *Field* drop-down list field contains all the Edit, Button and Label fields within the current screen, plus any Designer Variables, along with some special options…

Option	Description
User Profile	The current Infor System I Workspace AnyWhere user profile
Language	The current Infor System I Workspace AnyWhere language
Company	The current Infor System I Workspace AnyWhere company
Environment	The current Infor System I Workspace AnyWhere environment
Role	The current Infor System I Workspace AnyWhere role code
Application	The two-character System i Manager application code for the current IBM i application
Release	The two-character System i Manager release code for the current IBM i application
Taskcode	The four-digit System i Manager code for the current IBM i application
Last Actioned Key	The key the user pressed to trigger this Validation Rule

The *Field* field forms the left-hand side of the Test equation.

The *Condition* drop-down list field contains a list of Test conditions, of which one can be selected. The available conditions are…

Condition	Description
=	The content of the selected Field is identical to the content of the Value field.
<=	The content of the selected Field is less than or equal to the content of the Value field. This condition should only be used for testing numeric and date values.
>=	The content of the selected Field is greater than or equals the content of the Value field. This condition should only be used for testing numeric and date values.
<>	The content of the selected Field is not identical to the content of the Value field.
<	The content of the selected Field is less than the content of the Value field. This condition should only be used for testing numeric and date values.
>	The content of the selected Field is greater than the content of the Value field. This condition should only be used for testing numeric and date values.
Is One Of	The content of the selected Field is identical to one of the values listed in the Value field. The values in the Value fields should be separated with commas.
Is Not One Of	The content of the selected Field is not identical to any of the values listed in the Value field. The values in the Value fields should be separated with commas.
Starts With	The content of the selected Field begins with the content of the Value field.
Ends With	The content of the selected Field ends with the content of the Value field.
Contains the value	The content of the selected Field contains the content of the Value field.
Matches Regular Expression	Tests the content of the selected Field against the Regular Expression defined in the Value field. Succeeds if the Regular Expression returns a positive match result.
Does Not Match Regular Expression	Tests the content of the selected Field against the Regular Expression defined in the Value field. Succeeds if the Regular Expression returns a negative match result.

You must select a *Field* for the Condition drop-down list field to be populated.

If you select one of the special options within the *Field* field, the number of available options in the *Conditions* drop-down list will be restricted.

> **Caution:** Regular Expressions are a powerful pattern matching syntax used in many programming languages. For learning more about using Regular Expressions, we recommend the site http://www.regular-expressions.info/ which has a wealth of tutorial and reference material.

The *Value* field forms the right-hand side of the Test equation.

If you have selected a Label, Button or Edit field or Designer Variable from the *Field* drop-down list, the *Value* field will switch to a free-form edit field for you to enter your test value into, e.g.

Edit Test

Field

Input Field Row: 2 Column:17 ()

Condition

=

Value

TEST

Cancel   Apply

If you have selected a special option from the *Field* drop-down list, the *Value* will switch to a read-only field, where you will only be able to enter a fixed value read from System Manager or Infor System I Workspace AnyWhere; E.g.

Edit Test

Field

Last Actioned Key ▾

Condition

= ▾

Value

[   ] ✎

Cancel   **Apply**

When the *Value* field is read-only, select the prompt icon ✎ to the right of the Value field to open the relevant *Select* dialog for the current *Field* selection, e.g. if the *Field* is set to *Last Actioned Key*, the *Select Key* dialog is displayed.

The chosen *Condition* in the *Edit Test* dialog will control whether a single or multiple options can be selected within the *Select* dialog, e.g. for a single select condition (such as = condition)...

Select Key

Value

Enter ▾

Cancel   **Apply**

Within the *Select* dialog, choose the item you want from the dropdown list.

Select *Apply* to use the selection or select *Cancel* to discard the changes.

For a multi-select condition (such as *Is One Of* condition) the dropdown list in Select dialog changes…

Open the *Value* dropdown list and use the checkbox fields next to each option to select/unselect multiple options.

Select *Apply* to use the selections or select *Cancel* to discard the changes.

If *Apply* was selected, the *Value* field within the *Edit Test* dialog is updated with the selection, e.g. for a single value condition…

Or, for a multiple option value condition…

Select *Apply* to accept this Test or select *Cancel* to discard the changes.

If a Test was created, the *Tests* grid within the *Edit Rule* dialog will be updated with the new details. e.g.

If you click on an item within the *Tests* grid, a more verbose description of the Test is displayed below the grid, e.g.

At least one Test must be defined, but you can create more than one Test per Validation Rule. Each Test must succeed for the associated Validation Rule Actions to be applied to the current screen.

To edit an existing Test, select the Test within the *Tests* grid and then select the *Edit Test* icon ✎ from the toolbar above the *Tests* grid. The *Edit Test* dialog will be displayed.

To remove an existing Test, select the Test within the *Tests* grid and then select the *Remove Test* icon 🗑 from the toolbar above the *Tests* grid. The Test will be removed from the grid.

To create a new Action, select the *Add Action* icon ＋ from the toolbar above the *Actions* grid. The *Edit Action* dialog is displayed, e.g.

Select an action to apply to the screen from the *Action* drop-down list field. The available Actions are…

Action	Description
Show Error Message	Display an Error Message to the user. The last action performed by the user will not be sent to the IBM i application. The user will not be able to proceed until the error is corrected.
Show Warning Message	Display a Warning Message to the user. The last action performed by the user will not be sent to the IBM i application. If the user repeats the action, the message will not be displayed again, and the IBM i application will proceed as normal.
Show Informational Message	Display an Informational Message to the user. As the message is displayed, the last action performed by the user will be sent to the IBM i application, which will proceed as normal.
Set Field	Change the text value of a field on the current screen.
Clear Field	Change the text value of a field on the current screen to be empty.
Hide Field	Remove the field from the screen.
Show Field	Display a field that is currently hidden.
Set Field Color	Change the color of the field to one of the pre-defined system colors.
Set Field As Read-Only	Make a field non-editable.
Underline Field	Draw an underline under the field.
Show As Reverse Image	Draw the field using the Reverse Image style.
Add A Tooltip	Add a tooltip to the field.
Save To Variable	Save the selected field into a Designer Variable.
Set Field From Variable	Change the text value of a field on the current screen to the content of a Designer Variable.

The content of the *Field* drop-down list will change depending on the selected *Action*.

Action	Content of Field drop-down list
Set Field Clear Field Hide Field Show Field Set Field Color Set Field As Read-Only Underline Field Show As Reverse Image Add A Tooltip Save To Variable Set Field From Variable	A complete list of all the Edit, Button and Label fields available on the current screen, including hidden fields.
Show Error Message Show Warning Message Show Informational Message	No field required.

The format and required content of the *Value* field will change depending on the selected *Action*.

Action	Content of the Value field
Show Error Message Show Warning Message Show Informational Message	Enter the message text.
Set Field	Enter the new text value to set the field to.
Clear Field	No value required.
Hide Field	No value required.
Show Field	No value required.
Set Field Colour	Use the prompt button to select one of the pre-defined color values.
Set Field As Read-Only	No value required.
Underline Field	No value required.
Show As Reverse Image	No value required.
Add A Tooltip	Enter text to use as the tooltip for the selected field.

Action	Content of the Value field
Save To Variable	Use the prompt button to select a variable that will be set to the value of the selected field. See the Designer Variables section of the manual for more details.
Set Field From Variable	Use the prompt button to select a variable that will be used to set the value of the selected field. See the Designer Variables section of the manual for more details.

When the *Value* field is read-only, select the prompt icon ✎ to open the relevant *Select* dialog for the current *Action* selection.

If you wish to include values from the current screen within the Error/Warning/Informational message text, you can use the following special formats…

Format	Description	Example
%{var}	Insert a Infor System I Workspace AnyWhere substitution message into the message text	Display the Company Code %{company}
%n	Insert the 'n'th output field into the message text	Display 3rd Output Field: %3
@n	Insert the 'n'th input field into the message text	The Field @4 is wrong.
|	Subsequent data will appear in 2nd line of the message box	The Main Message|The Sub-Message
\n	Insert a new line into the message text (should only be used in sub-message section)	Main Message|Line 1\nLine 2

Here are some Validation Rule Action examples…

1) Where a message is required…

Edit Action

Action

Show Error Message ▼

Field

▼

Value

You are not authorised to access account @1|Choose another account. ✎

Cancel   Apply

2) Where an override value is required…

Edit Action

Action

Set Field ▼

Field

Input Field Row: 2 Column:62 () ▼

Value

ERROR ✎

Cancel   Apply

3) Where no value is required…

Edit Action

Action

Hide Field ▼

Field

Input Field Row: 2 Column:17 (001212) ▼

Cancel	Apply

4) Where the value is prompt-able…

Edit Action

Action

Set Field Colour ▼

Field

Output Field Row: 23 Column:21 (F13=Receiving Addr.) ▼

Value

Pink ✐

Cancel	Apply

Select *Apply* to accept this Action or select *Cancel* to discard the changes.

If an Action was created, the *Actions* grid within the *Edit Rule* dialog will be updated with the new details, e.g.
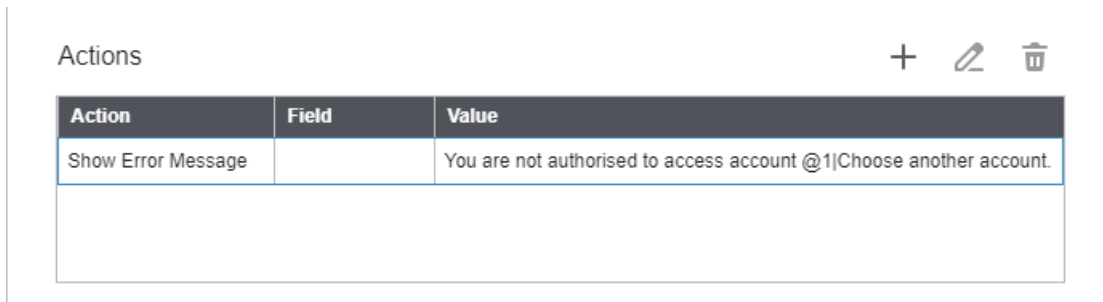
If you select an item within the *Actions* grid, a more verbose description of the Action is displayed below the grid, e.g.
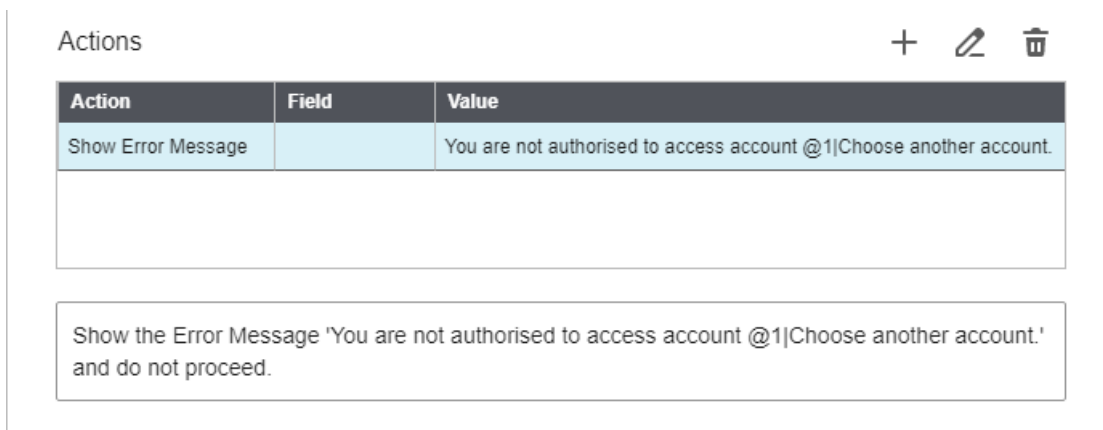
At least one Action must be defined, but you can create more than one Action per Validation Rule. Each Action will be performed in the order shown in the grid.

To edit an existing Action, select the Action within the *Actions* grid and then select the *Edit Action* icon ✎ from the toolbar above the *Actions* grid. The *Edit Action* dialog will be displayed.

To remove an existing Action, select the Action within the *Actions* grid and then select the *Remove Action* icon 🗑 from the toolbar above the *Actions* grid. The Action will be removed from the grid.

Select *Apply* to accept the Validation Rule or select *Cancel* to discard any changes made within the *Edit Rule* dialog.

If you select *Apply*, and there are no entries in the *Tests* grid, you will see the following message…

If you select *Apply*, and there are no entries in the *Actions* grid, you will see the following message…

Error

You must define at least one Action.

Close
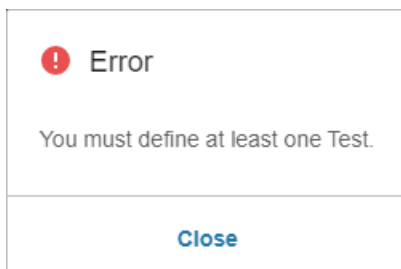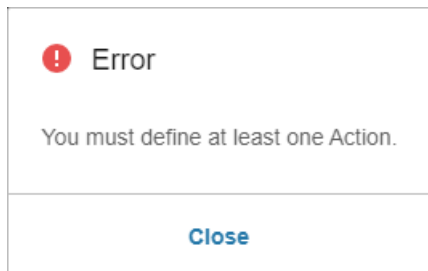
On successful creation of a Validation Rule, you will see the new Rule within the *Rules* grid of the *Define Validation Rules* dialog, e.g.

Define Validation Rules

Rules   + ✎ 🗑 🗐

When an Action occurs and when the last Actioned Key is Equal To Enter then show the Warning Message 'Supplier @3 is currently in li

Cancel   Apply
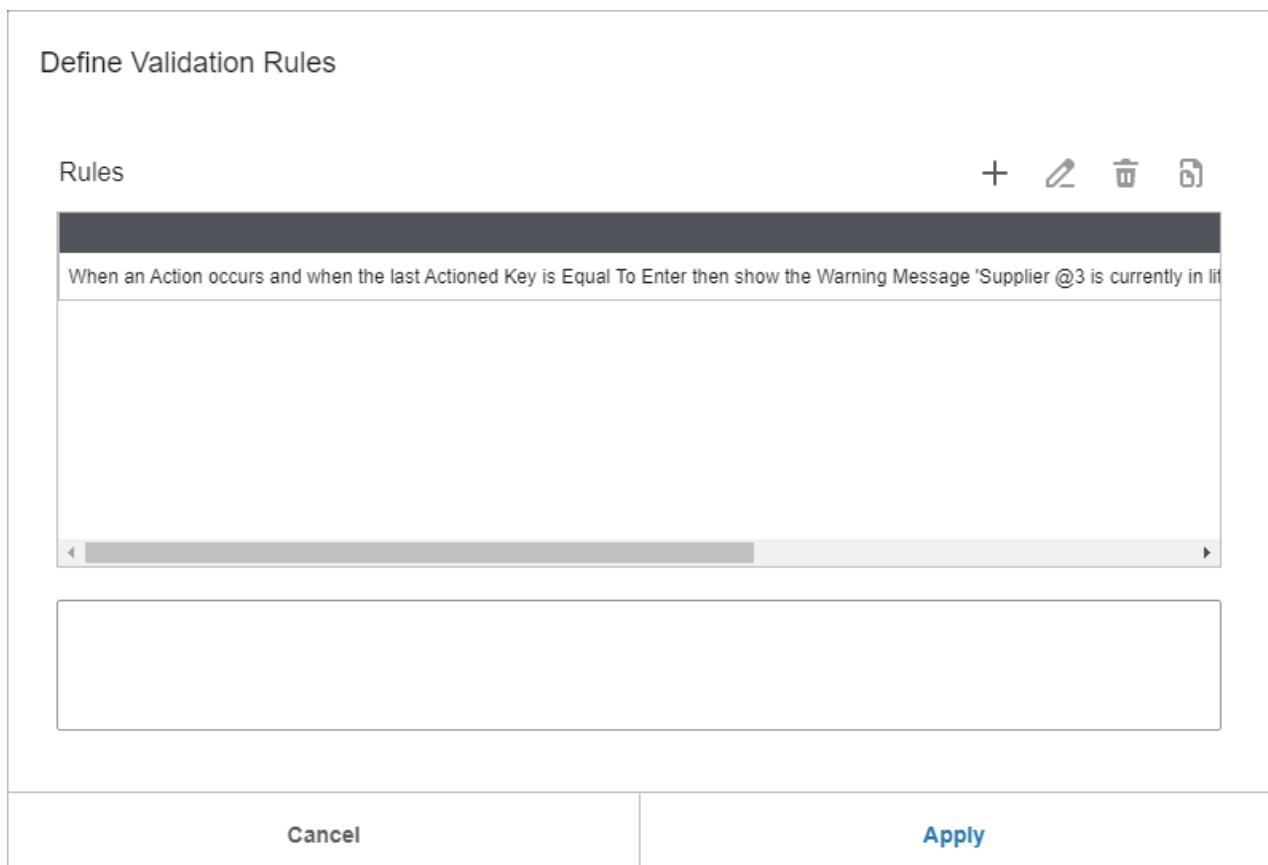
If you select an item within the *Rules* grid, a more verbose description of the Validation Rule is displayed below the grid, e.g.

Define Validation Rules

Rules   + ⟋ 🗑 ⎘

When an Action occurs and when the last Actioned Key is Equal To Enter and when input Field Row: 3 Column:17 (GS01) is Equal To G:

When an Action occurs and when the last Actioned Key is Equal To Enter and when input Field Row: 3 Column:17 (GS01) is Equal To GS01 then show the Warning Message 'Supplier @3 is currently in litigation with accounting department.' once, proceed when user confirms the action again.

Cancel	Apply

You may create as many Validation Rules as you like. They will be applied, when the user performs any action that would send information to the IBM i application, in the order they appear in the *Rules* grid. If a Validation Rule's conditions are met, no further Validation Rules will be processed (e.g., if you define three Validation Rules, which result in three Error Messages, only the first matching Error Message would be displayed until the user corrects the error within the display).

To edit an existing Validation Rule, select the Rule within the *Rules* grid and then select the *Edit Rule* icon ⟋ from the toolbar above the *Rules* grid. The *Edit Rule* dialog will be displayed.

To remove an existing Validation Rule, select the Rule within the *Rules* grid and then select the *Remove Rule* icon 🗑 from the toolbar above the *Rules* grid. The Rule will be removed from the grid.

To duplicate an existing Validation Rule, select the Rule within the *Rules* grid and then select the *Duplicate Rule* icon ⎘ from the toolbar above the *Rules* grid. The selected Validation Rule will be duplicated within the grid. The duplicate Validation Rule will be added to the bottom of the grid.

Select *Apply* to accept the Validation Rules or select *Cancel* to discard any changes.

At run-time, when the user performs an action, a successful Validation Rule containing a *Show Error Message* Action will display like this…
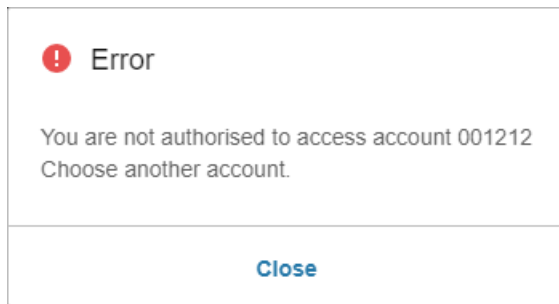
At run-time, when the user performs an action, a successful Validation Rule containing either a *Show Warning Message* or *Show Informational Message* Action will display like this…
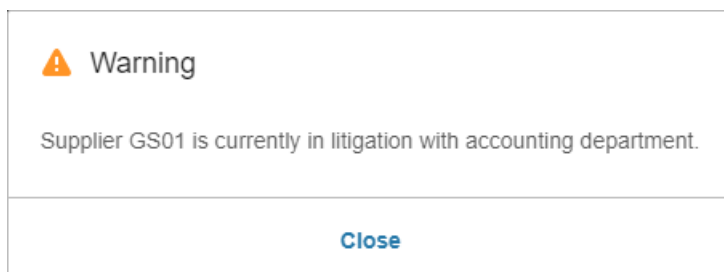
Caution: You should make sure that you do not introduce a Validation Rule that prevents the user from exiting the IBM i application. We recommend that you always use the *Last Actioned Key* Test so that validation is only applied to specific user actions, and not to ANY action.

Publishing Messages to Infor Ming.le™

The Infor Ming.le™ (also known as the Infor Operating System) framework provides a common user-interface to all Infor applications (including Infor System I Workspace AnyWhere) along with an extensive set of optional components. Applications and components (sometimes known as Web Parts) can be made "context aware" by publishing messages to them as the user navigates through Infor application screens.

Additionally, extensions added to the Infor System I Workspace AnyWhere user-interface, commonly known as Widgets, can also be "context aware".

Designer allows you to define, on a per-screen basis, which messages to publish and the dynamic data content that will be transmitted.

To define one or more publishable messages for the current screen, select the *Screen - Publish Data* menu item. The *Messages to Publish from This Screen* dialog is displayed, e.g.
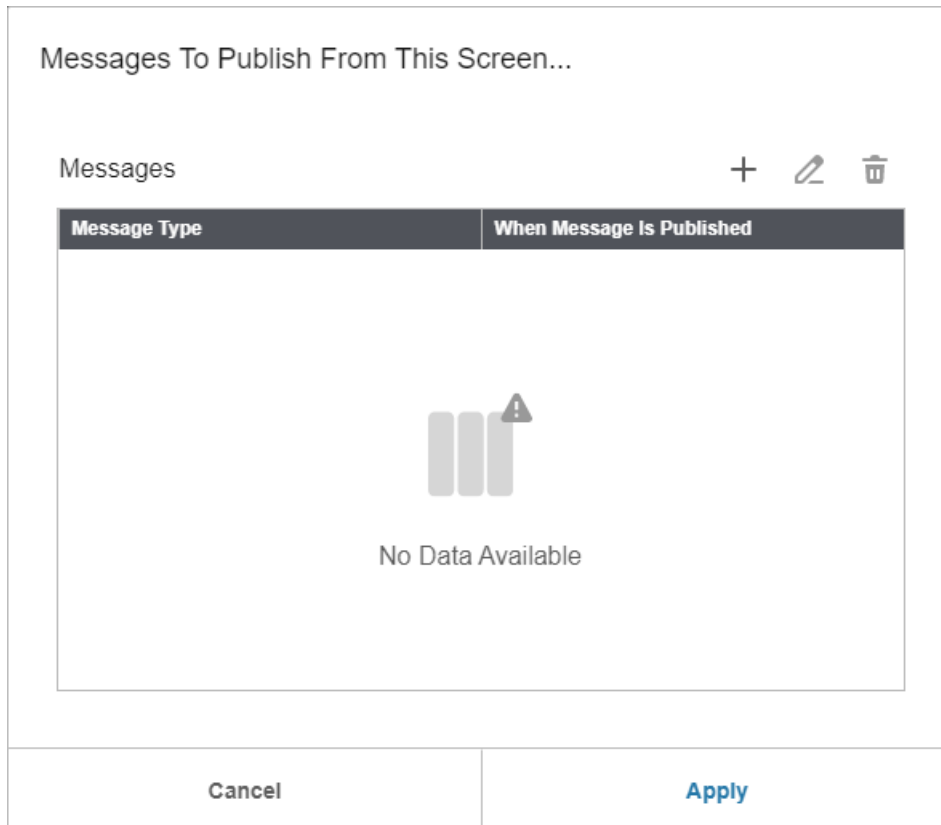
The grid contains a list of all the publishable messages defined for the current application screen.

To create a new message, select the *Add Message* icon + from the toolbar. The *Message To Publish* dialog is displayed, e.g.

The *Message Type* field contains the list of available messages that can be published from this screen. You must select a message from the list.

The list of available messages will consist of the standard message definitions supplied by Infor with Infor System I Workspace AnyWhere, along with any additional message definitions added by your System Administrator.

The *When to Call Message* field contains a list of events that can cause this message to publish. You must select an event from the list. The available events are…

Event	Description
When the screen is displayed	The message will be published to the Infor Ming.le™ framework when any screen update is sent from the System i server
When any action is performed	The message will be published to the Infor Ming.le™ framework when the user presses a key that will cause data to be transmitted to the System i server
When a specific function key is pressed	The message will be published to the Infor Ming.le™ framework when the user presses a specific function key that will cause data to be transmitted to the System i server.

If the *When a specific Function Key is pressed* event is selected within the *When to Call Message* field, a settings icon will appear to the right of the field, e.g.

When to Call Message:

| When a specific Function Key is pressed | ▼ | ⚙ |

Click the setting icons to display the *Select Keys* dialog, E.g.

Select Keys

| | ▼ |

| Cancel | Select |

Expand the dropdown list and select one or more keys that will be associated with this event. When the key is pressed at run-time, the event will fire.

Choose *Select* to accept the selected key(s) or select *Cancel* to discard the changes.

The *Message Parameters* grid will be updated depending on the *Message Type* you select, e.g.

Message To Publish...

Message Type:

Customer Party Master ▾

When to Call Message:

When the Screen is displayed ▾ ⚙

Message Parameters ✎

Parameter Name	Optional	Value
Customer Code	No	
Delivery Sequence	No	
Customer Name	Yes	
Customer Description	Yes	
Message Text	Yes	

Cancel	Apply

Message To Publish...

Message Type:

Share ▾

When to Call Message:

When the Screen is displayed ▾ ⚙

Message Parameters ✎

Parameter Name	Optional	Value
Message Text	No	

Cancel	Apply

The *Parameter Name* column contains the unique name for the Parameter and cannot be altered via this dialog.

The *Optional* column specifies whether you must define a value for the parameter. If the parameter is optional, and you choose not to specify it, a default value, provided within the message definition, will be used, at run-time.

To edit the *Value* assigned to a Parameter, click the row within the grid to highlight it and then select the *Edit* icon ✐ from the toolbar above the grid The *Define Values For Parameter {Parameter Name}* dialog is displayed; E.g.
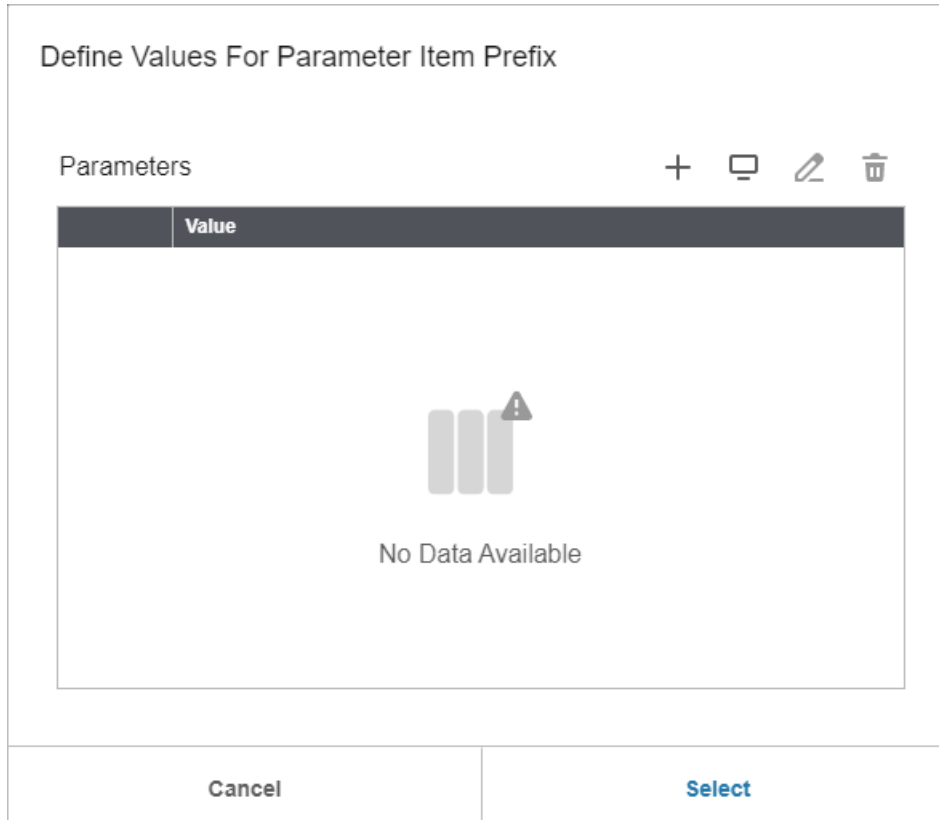
The *Value* grid contains the list of all the Values defined for the current Message Parameter.

To add a Fixed Value parameter, select the *Add Fixed Value* icon + from the *Parameters* grid toolbar. The *Parameter Properties* dialog will be shown, e.g.

Parameter Properties

Parameter Value:

| Cancel | Change |

Enter any text value within the *Parameter Value* field.

Select *Change* to accept the selected parameter value or select *Cancel* to discard the changes.

To add a Screen Field or Designer Variable parameter select *the Add Screen Field or Designer Variable* icon 🖥 from the *Parameters* grid toolbar. The *Parameter Properties* dialog will be shown, e.g.

Parameter Properties

Parameter Value:

Input Field Row: 2 Column:17 (001212) ▼

☐ Only use a Sub-section of this Override Value

Start Position: Sub-section Length:

| - | 1 | + | | - | 1 | + |

| Cancel | Change |

In the *Parameter Value* field, select the input/output field from the current application screen, or a Designer Variable, that will be dynamically read at run-time and passed as the value. The fields in the drop-down are listed using their host row/column position along with their current content to make it easier to determine which one to select.

The list also contains hidden/non-display field values.

Check the *Only use a Sub-section of this Parameter Value* field to elect to use only a part of the Screen Field as the Parameter Value. If this is unchecked, the whole field will be used.

Use the *Start Position* numeric field to set the character position that marks the beginning of the sub-section.

Use the *Sub-section Length* numeric field to set the size of the override value sub-section.

Select *Change* to confirm the parameter setting or *Cancel* to discard it.

You may add any number of Values to the *Values* grid. At run-time, all the Values will be concatenated together to become the content of the Message Parameter.

To edit a parameter within the *Define Values For Parameter {Parameter Name}* dialog's *Parameters* grid, select any parameter in the grid to highlight it then select the *Edit* icon ✏ from the toolbar. The appropriate *Parameter Properties* dialog will be displayed.

To change the order of the parameters, press and hold down your mouse button on the ⋮ icon in the first column of the *Parameters* grid, drag the row to the new location, then release the mouse button to assign it to that position within the grid.

To remove a parameter from the *Define Values For Parameter {Parameter Name}* dialog's *Parameters* grid, select any parameter in the grid to highlight it and then select the *Remove* icon 🗑 from the toolbar. The parameter will be removed from the *Parameters* grid.

Choose *Select* to accept the Values or select *Cancel* to discard any changes made within the *Define Values For Parameter {Parameter Name}* dialog.

The Value will be updated within the *Message Parameters* grid against the appropriate parameter. Within the *Message To Publish* dialog, you must set Values for all the mandatory options.

Select *Apply* to accept the Message definition settings or select *Cancel* to discard any changes made within the *Message To Publish* dialog.

If you select *OK* and you have not set the *Message Type* field, you will see the following error message…
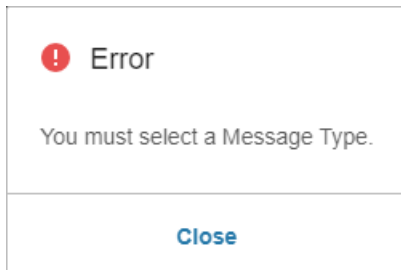
Select *Close* to close the error message and either select an entry from the *Message Type* field or select the *Cancel* option to discard the message definition.

If you select *Apply* and you have not set one or more of the mandatory parameters associated with the current message, you will see the following error message…
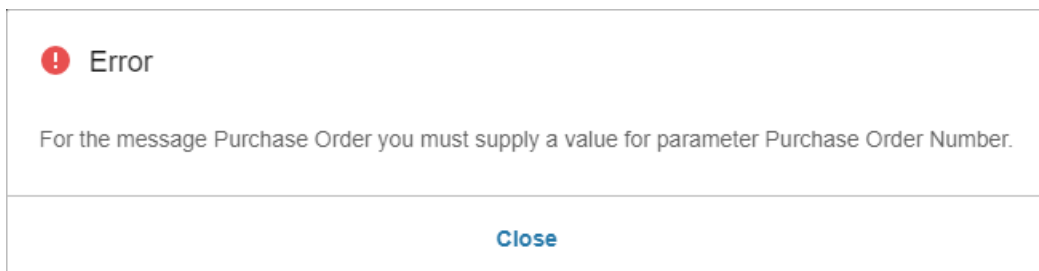
The text in the error message above will vary depending on the message and the parameter you need to specify. Select *Close* to close the error message and either add a value for the noted parameter or select the *Cancel* option to discard the message definition.

The *Messages To Publish From This Screen* dialog will be updated with any changes you have made; E.g.

Messages To Publish From This Screen...

Messages   +   🖊   🗑

Message Type	When Message Is Published
Purchase Order	When the Screen is displayed

Cancel   **Apply**

To edit an existing Message, select it within the grid and then select the *Edit Message* icon 🖊 from the toolbar above the grid. The *Message To Publish* dialog will be displayed.

To remove an existing Message, select it within the grid and then select the *Remove Message* icon from the toolbar above the grid. The Message will be removed from the grid.

Select *Apply* to accept the Messages or select *Cancel* to discard any changes made within the *Messages To Publish From This Screen* dialog.

Caution: See the Example Designs chapter for an example of defining and using this functionality.

Show a Widget

Widgets are extensions to the Infor System I Workspace AnyWhere user interface that provide complimentary functionality to the user (e.g. display an image of the current item they are ordering, list their current IBM i Spool Files).

See the *Global Widgets* section for more information on how to create a Widget definition.

To define one or more Widgets to be displayed on the current screen, select the *Screen – Show Widget* menu item. The *Widgets To Show From This Screen* dialog is displayed, e.g.
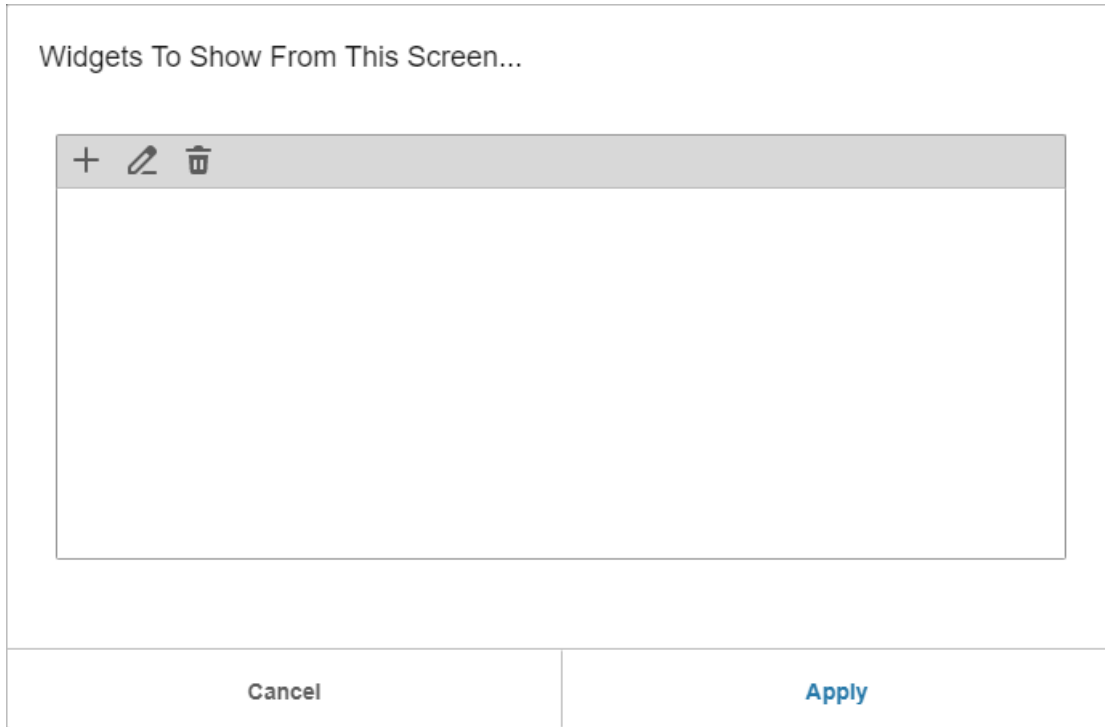
The grid contains a list of all the Widgets that will be displayed from the current application screen.

To add a new widget, click the *Add Widget Definition* icon ➕ . The *Select Widget* dialog is displayed, e.g.

The drop-down list contains all the Widgets defined for the current Infor System I Workspace AnyWhere Profile.

Check the *Automatically Close Widget* field if you want the 5250 AnyWhere Emulator to control the dismissal of the Widget. Once selected, the Radio buttons below this field become enabled. Select one of the options….

Option	Description
On Any Screen Change	Each IBM i screen has a unique index (Magic Number). If the Magic Number of the new screen is different to the one that initiated the Widget display, the Widget will be automatically removed from the display.
Only on Full Screen Change	Same as the previous option except the Widget will only be automatically removed from the display if the new screen is a completely new screen. If the new screen is a popup window, the Widget will not be removed.

Check the *Allow User To Close Widget* field if you want to allow the user the ability to manually dismiss the Widget.

Caution: You must select at least one of these options otherwise the user will be left in a situation where they cannot remove the Widget from the display. If neither is selected, the *Allow User To Close Widget* option will be selected by default.

Check the *Widget will notify System i Workspace when it is ready to accept contextual data field* if the Widget you are displaying has been written to send a message when it is ready to receive data.

Choose *Select* to accept the Widget settings or select *Cancel* to discard any changes made within the *Select Widget* dialog.

If you select *OK* and you have not selected a Widget, you will see the following error message…
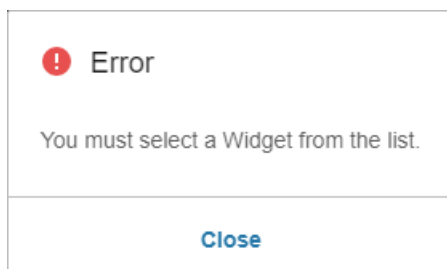
Select *Close* to close the error message and either select an entry from the *drop-down list* or select the *Cancel* option to discard the Widget definition.

The *Widgets To Show From This Screen* dialog will be updated with any changes you have made; E.g.

Widgets To Show From This Screen...

+ ✎ 🗑

widgetSpool (./server/widgets/service-viewer/service-viewer.xsp?
pageSize=5&refresh=300&maxRecords=1000)

| Cancel | **Apply** |
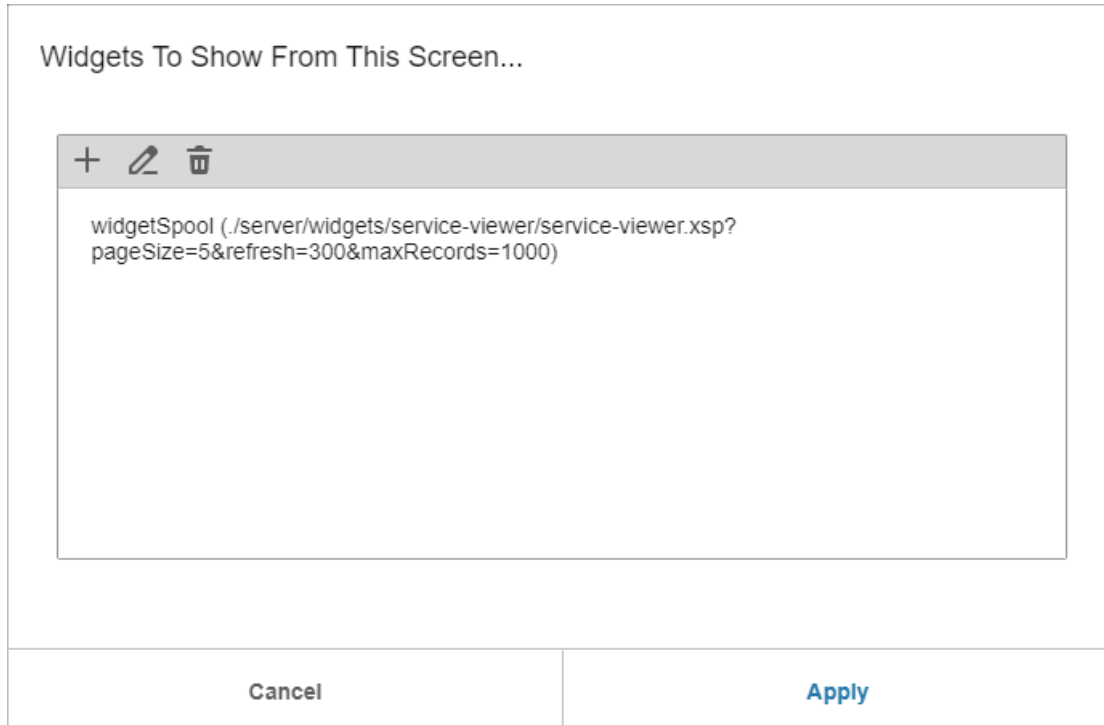
To edit an existing Widget definition, select it within the grid and then click the *Edit Widget Definition* icon ✎ . The *Select Widget* dialog will be displayed.

To remove an existing Widget definition, select it within the *grid*, so that it is highlighted, and then select the *Remove Widget Definition* icon 🗑 . The Widget definition will be removed from the grid.

If either of the *Edit Widget Definition* or *Remove Widget Definition* icons are clicked when no row in the grid is highlighted, then no change will be performed.

Select *Apply* to accept the Widget definitions or select *Cancel* to discard any changes made within the *Widgets To Show From This Screen* dialog.

The Global Menu

Global Rules

Global Rules provide a method of making changes (which we will refer to as Actions) to every IBM i application screen based on a set of criteria (which we will refer to as Tests). Global Rules are intended to be used by System Administrators who want to change behavior across multiple IBM i application programs without having to write Infor System I Workspace AnyWhere extension's or create bespoke IBM i applications.

To create a new Global Rule, select the *Global – Define Global Rules* menu item. The *Define Rules* dialog is displayed, e.g.
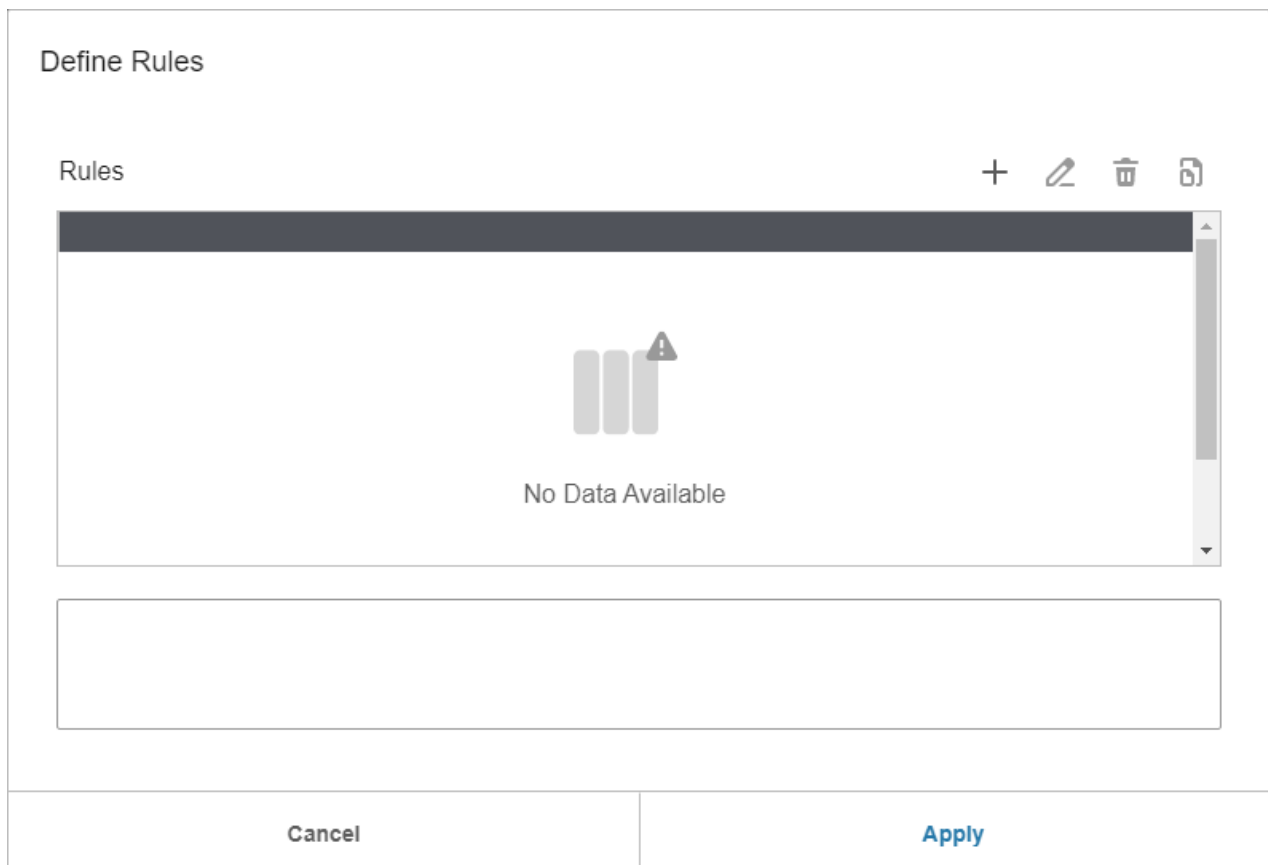
The *Rules* grid contains a list of all the Global Rules defined for all application screens.

To create a new Global Rule, select the Add Rule icon $+$ from the toolbar. The *Edit Rule* dialog is displayed, e.g.

The *Tests* grid contains the list of all the Tests defined for the current Rule.

The *Actions* grid contains the list of all the Actions defined for the current Rule.

To create a new Test, select the *Add Test* icon ＋ from the toolbar above the Tests grid. The *Edit Test* dialog is displayed, e.g.

Edit Test

Field

▼

Condition

▼

Value

✏

Cancel | **Apply**

The *Field* drop-down list field contains any Designer Variables plus the following options…

Option	Description
User Profile	The current Infor System I Workspace AnyWhere user profile
Language	The current Infor System I Workspace AnyWhere language
Company	The current Infor System I Workspace AnyWhere company
Environment	The current Infor System I Workspace AnyWhere environment
Role	The current Infor System I Workspace AnyWhere role code
Application	The two-character System Manager application code for the current IBM i application
Release	The two-character System Manager release code for the current IBM i application
Taskcode	The four-digit System Manager code for the current IBM i application
Screen	Special option for determining if the screen is displayed in a Popup Window or if it was designed by Infor
Screen Designer ID	The IBM i User Profile ID of the person who designed the current screen (can be blank if no design is applied to the current screen)
Host Message Dialog text	A special test that is only activated when the IBM i server sends a Host Message to the user (e.g. a Host Message may be sent if they press an incorrect key or have failed to enter valid data)

Option	Description
Button Attribute	This test is used to examine the display attributes of a Button field. In IBM i ERP programs, buttons may sometimes be highlighted to indicate certain conditions (e.g. an option to show Text for a Sales Order may be highlighted to indicate text has been already entered)
Any Output Field	Any Label or read-only Edit field within the current IBM i Application screen that is being displayed

The *Field* field forms the left-hand side of the Test equation.

The *Condition* drop-down list field contains a list of Test conditions, of which one can be selected. The available conditions are…

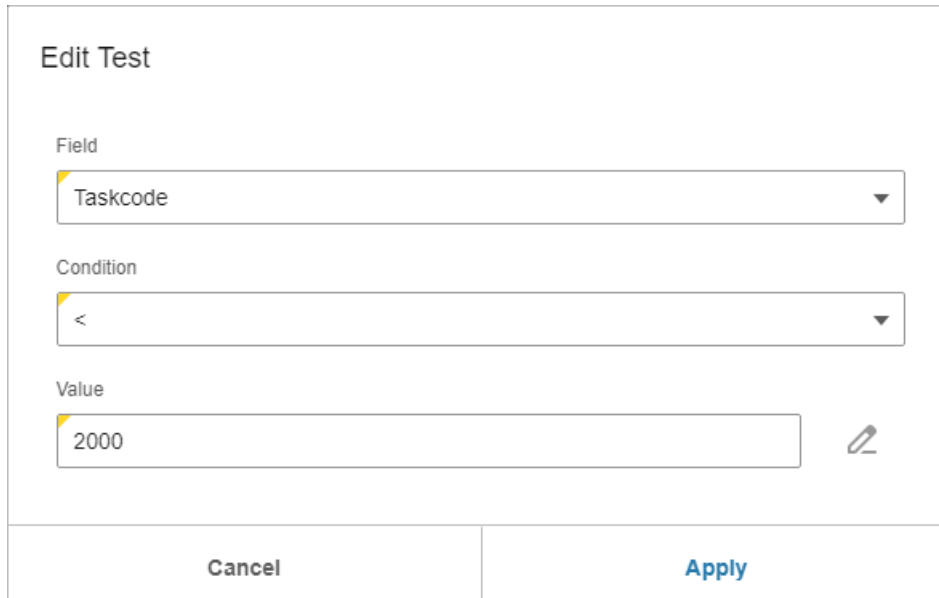| Condition	Description
=	The content of the selected Field is identical to the content of the Value field.
<=	The content of the selected Field is less than or equal to the content of the Value field. This condition should only be used for testing numeric and date values.
>=	The content of the selected Field is greater than or equals the content of the Value field. This condition should only be used for testing numeric and date values.
<>	The content of the selected Field is not exactly the same as the content of the Value field.
<	The content of the selected Field is less than the content of the Value field. This condition should only be used for testing numeric and date values.
>	The content of the selected Field is greater than the content of the Value field. This condition should only be used for testing numeric and date values.
Is One Of	The content of the selected Field is identical to one of the values listed in the Value field. The values in the Value fields should be separated with commas.
Is Not One Of	The content of the selected Field is not identical to any of the values listed in the Value field. The values in the Value fields should be separated with commas.
Starts With	The content of the selected Field begins with the content of the Value field.
Ends With	The content of the selected Field ends with the content of the Value field.
Contains the value	The content of the selected Field contains the content of the Value field.
Matches Regular Expression	Tests the content of the selected Field against the Regular Expression defined in the Value field. Succeeds if the Regular Expression returns a positive match result.

Condition	Description
Does Not Match Regular Expression	Tests the content of the selected Field against the Regular Expression defined in the Value field. Succeeds if the Regular Expression returns a negative match result.

If the *Field* is set to the *Screen* option, the *Condition* drop-down list will contain just two values…

Condition	Description
Is a popup	True if the current screen is a Popup Window
Is not a popup	True if the current screen is not Popup Window
Was Designed By Infor	True if the current screen design came from the Screen Design Templates
Was Not Designed By Infor	True if the current screen design did not come from the Screen Design Templates

If the *Field* is set to the *Button Attribute* option, the *Condition* drop-down list will contain the following values…

Condition	Description
is set to Reverse Image	The selected button has the 5250 Reverse Image attribute applied to it
is set to Green	The selected button has the 5250 Green attribute applied to it (e.g. normal output text)
is set to White	The selected button has the 5250 White attribute applied to it (also known as high intensity)
is set to Red	The selected button has the 5250 Red attribute applied to it
is set to Red Highlight	The selected button has the 5250 Red Highlight attribute applied to it
is set to Blue	The selected button has the 5250 Blue attribute applied to it
is set to Cyan	The selected button has the 5250 Cyan attribute applied to it
is set to Yellow	The selected button has the 5250 Yellow attribute applied to it
is set to Magenta	The selected button has the 5250 Magenta attribute applied to it
is not set to Reverse Image	The selected button does not have the 5250 Reverse Image attribute applied to it

Condition	Description
is not set to Green	The selected button does not have the 5250 Green attribute applied to it (e.g. normal output text)
is not set to White	The selected button does not have the 5250 White attribute applied to it (also known as high intensity)
is not set to Red	The selected button does not have the 5250 Red attribute applied to it
is not set to Red Highlight	The selected button does not have the 5250 Red Highlight attribute applied to it
is not set to Blue	The selected button does not have the 5250 Blue attribute applied to it
is not set to Cyan	The selected button does not have the 5250 Cyan attribute applied to it
is not set to Yellow	The selected button does not have the 5250 Yellow attribute applied to it
is not set to Magenta	The selected button does not have the 5250 Magenta attribute applied to it

If the field is set to *the Any Output Field* option, the *Condition* drop-down list will contain the following values…

Condition	Description
Has A Numeric Value	Evaluate the Field as a numeric value. Succeeds if the Field value can be converted to an integer or decimal value.
Does Not Have A Numeric Value	Evaluate the Field as a numeric value. Succeeds if the Field value cannot be converted to an integer or decimal value.
Matches Regular Expression	Tests the content of the selected Field against the Regular Expression defined in the Value field. Succeeds if the Regular Expression returns a positive match result.
Does Not Match Regular Expression	Tests the content of the selected Field against the Regular Expression defined in the Value field. Succeeds if the Regular Expression returns a negative match result.

You must select a *Field* for the Condition drop-down list field to be correctly populated.

Depending on the selected *Field*, the number of available options in the *Conditions* drop-down list may be restricted.

> **Caution:** Regular Expressions are a powerful pattern matching syntax used in many programming languages. For learning more about using Regular Expressions, we recommend the site http://www.regular-expressions.info/ which has a wealth of tutorial and reference material.
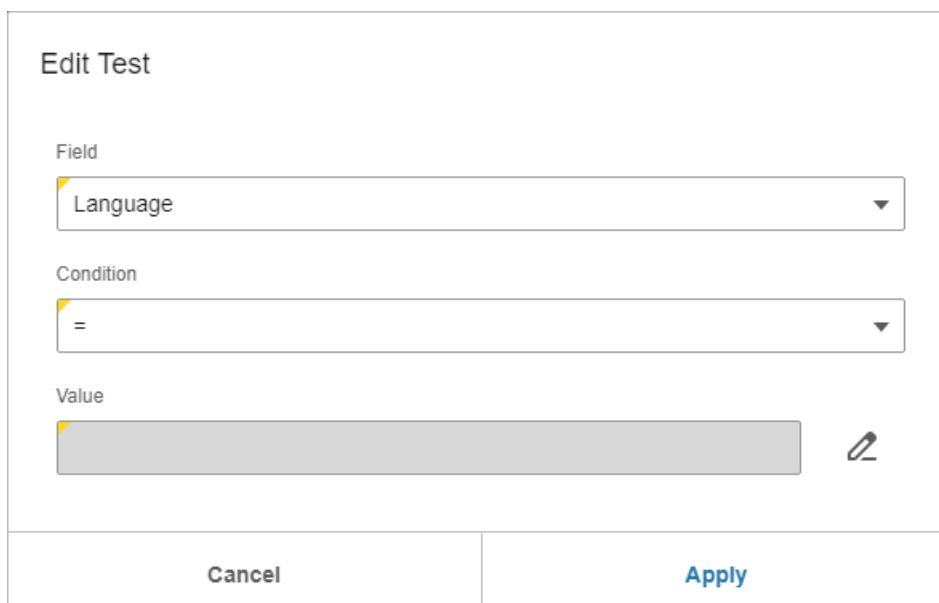
The *Value* field forms the right-hand side of the Test equation.

If you have selected a Designer Variable, Screen Designer ID, Application, Release, Taskcode or the Host Message Dialog text from the *Field* drop-down list, the *Value* field will switch to a free-form edit field for you to enter your test value into; E.g.

Edit Test

Field

Taskcode ▼

Condition

< ▼

Value

2000 ✎

Cancel   **Apply**
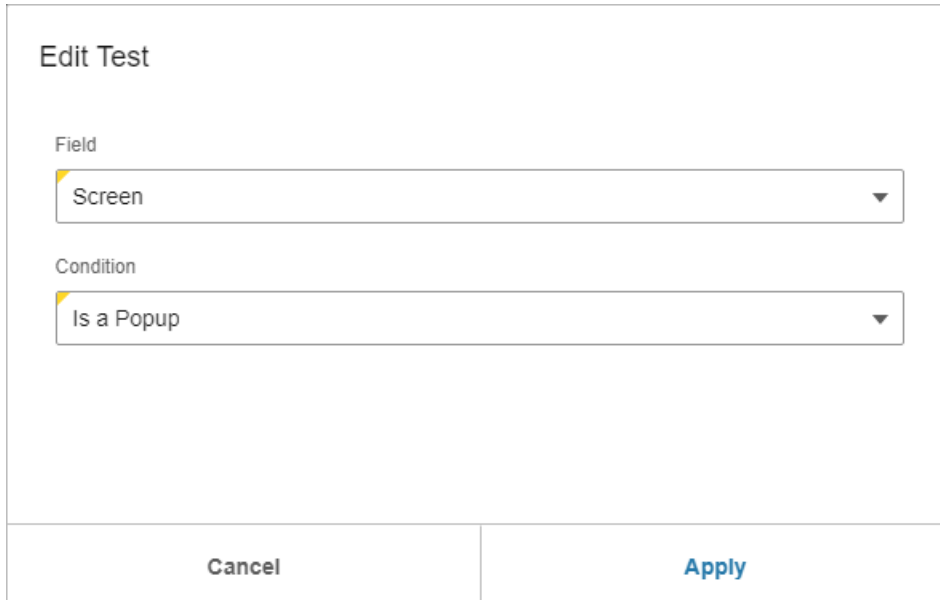
If you have selected any fixed value *Field* option, the *Value* will switch to a read-only prompt field, where you will only be able to enter a fixed value read from System Manager or Infor System I Workspace AnyWhere, or a Designer Variable (i.e. at runtime, the *Field* will be compared to the current content of the Designer Variable); E.g.

Edit Test

Field

Language ▼

Condition

= ▼

Value

✎

Cancel   **Apply**

If you have selected the *Screen* option from the *Field* drop-down list, a *Value* is not required, e.g.

When the *Value* field is read-only, select the prompt icon ✐ to the right of the Value field to open the relevant *Select* dialog for the current *Field* selection, e.g. if the *Field* is set to *Language*, the *Select Language* dialog is displayed.

The chosen *Condition* in the *Edit Test* dialog will control whether a single or multiple options can be selected within this dialog, e.g. for a single select condition (such as = condition)...

Within the *Select* dialog, choose the item you want from the dropdown list.

Select *Apply* to use the selection or select *Cancel* to discard the changes.

For a multi-select condition (such as *Is One Of* condition) the dropdown list in Select dialog changes…

Open the *Value* dropdown list and use the checkbox fields next to each option to select/unselect multiple options.

Select *Apply* to use the selections or select *Cancel* to discard the changes.

If *Apply* was selected, the *Value* field within the *Edit Test* dialog is updated with the selection, e.g. for a single value condition…

Or, for a multiple option value condition…

Select *Apply* to accept this Test or select *Cancel* to discard the changes.

If a Test was created, the *Tests* grid within the *Edit Rule* dialog will be updated with the new details, e.g.

If you click on an item within the *Tests* grid, a more verbose description of the Test is displayed below the grid, E.g.

Edit Rule

Tests   +   ✎   🗑

Field	Condition	Value
Screen	is a Popup	

When the current screen is a Popup.

Within a Global Rule, you do not have to define a Test. If no Test is defined, Designer will apply all the defined Actions to **every** application screen.

> **Caution:** If you wish to use the *Apply a Field Format to any matching Output Field* Action, you must use *the Any Output Field* Test.

You can create more than one Test per Global Rule. Each Test must succeed for the associated Global Rule Actions to be applied to the current screen.

To edit an existing Test, select the Test within the *Tests* grid and then select the *Edit Test* icon ✎ from the toolbar above the *Tests* grid. The *Edit Test* dialog will be displayed.

To remove an existing Test, select the Test within the *Tests* grid and then select the *Remove Test* icon 🗑 from the toolbar above the *Tests* grid. The Test will be removed from the grid.

To create a new Action, select the *Add Action* icon + from the toolbar above the *Actions* grid. The *Edit Action* dialog is displayed, e.g.

Edit Action

Action

▼

Field

▼

Value

✎

Cancel   Apply

Select an action to apply to the screen from the *Action* drop-down list field. The available Actions are…

Action	Description
Set Font	Change the font used for every IBM i application screen. A Screen-specific font override will take precedence over one set by a Global Rule.
Clip Top Lines	Clip the top lines of the IBM i application screen. A Screen-specific clipping will take precedence over one set by a Global Rule.
Clip Bottom Lines	Clip the bottom lines of the IBM i application screen. A Screen-specific clipping will take precedence over one set by a Global Rule.
Compress Whitespace	Enable the compression of whitespace (i.e. change the height of rows that contain no text data to zero-pixel height). A Screen-specific whitespace setting will take precedence over one set by a Global Rule.
Compress Buttons	Enable the compression of buttons. A Screen-specific button compression setting will take precedence over one set by a Global Rule.
Remove Stops	Remove any trailing stops that appear within Label fields (e.g. Account…….? becomes Account ?).
Right-align Labels	Right-align all Label fields within the screen.

Action	Description
Show Function Key Values	Show the associated function key value within the button text (e.g. Exit becomes F3:Exit).
Set White Text Color	Set the color used for White text within IBM i application screens. Overrides a user's color setting.
Set Red Text Color	Set the color used for Red text within IBM i application screens. Overrides a user's color setting.
Set Blue Text Color	Set the color used for Blue text within IBM i application screens. Overrides a user's color setting.
Set Cyan Text Color	Set the color used for Cyan text within IBM i application screens. Overrides a user's color setting.
Set Yellow Text Color	Set the color used for Yellow text within IBM i application screens. Overrides a user's color setting.
Set Pink Text Color	Set the color used for Pink text within IBM i application screens. Overrides a user's color setting.
Right-align Numeric Labels	Right-align all label fields that contain numeric data.
Hide Function Key Buttons	Hide specific function buttons.
Hide All Function Key Buttons	Hide every function button. The 5250 AnyWhere Emulator Actions drop-down list will still contain all the available actions.
Add Window Title Area	Create a Window Title Area that will insert any fields within the rectangular area to the beginning of the Window Title.
Publish Message to Infor Ming.le™	Define a message that will be posted to the Infor Ming.le™ framework and to any Infor System I Workspace AnyWhere components that listen for Business Context messages.
Compress Program Buttons	Compress only buttons that are part of the standard application. Any buttons added by Designer will remain in their designed position.
Auto-Dismiss Host Message Dialog	This option will only appear if you have one or more Tests that use the Host Message Dialog text field. Selecting this Action will prevent the incoming Host Message Dialog from being displayed to the user.
Compress Whitespace, except in Tables/Group Boxes	Always apply white-space compression except when the empty row intersects a Table or Group Box. A Screen-specific white-space setting will take precedence over one set by a Global Rule.
Show a More Detail icon on the button	Show the More Detail icon on the selected button

Action	Description
Show an Information Icon on the button	Show an Information Icon (blue circle with white "i" in the middle) on the selected button
Show an Alert Icon on the button	Show an Alert Icon (orange triangle with white exclamation mark in the middle) on the selected button
Show an Error Icon on the button	Show an Error Icon (red circle with white exclamation mark in the middle) on the selected button
Show a Widget	Display the selected Widget within the current 5250 AnyWhere Emulator page (usually to the right-side of the display)
Apply a Field Format to any matching Output Field	Apply a Global Field Format to all matching fields
Add OK button	Show a command button with the label "OK" (which is triggered by/triggers when pressed the Enter key) on every screen that matches the Global Rule
Add Next button	Show a command button with the label "Next" (which is triggered by/triggers when pressed the Enter key) on every screen that matches the Global Rule
Apply a Hyperlink Definition to any matching Output Field	Apply a Global Hyperlink Definition to all matching fields
Set the 5250 AnyWhere Emulator Font Width Adjustment	Change the 5250 AnyWhere Emulator Font Width Adjustment value that will be used for every IBM i application screen displayed in 5250 AnyWhere Emulator. A Screen-specific Font Width Adjustment override will take precedence over one set by a Global Rule. **Caution:** See the *Font Width Adjustment* sub-section in the Extending the Screen Area section for more information about this setting and its effect on the 5250 AnyWhere Emulator display.
Add System Manager Data to Window Title	Prepend one or more items of System i Manager data for the current task to the Window Title.
Add System Manager Data to Tab Title	Prepend one or more items of System i Manager data for the current task to the Tab Title.

Caution: If you have one or more Tests that use the Host Message Dialog Text field, then not all the above actions will be available.

The format and required content of the *Value* field will change depending on the selected *Action*.

Action	Description
Set Font	Enter a valid font name (e.g. Courier New, Times New Roman, etc.) override that will be used on all IBM i application screens.
Clip Top Lines Clip Bottom Lines	Enter a numeric integer value between 0 and 23/27.
Compress Whitespace Compress Buttons Remove Stops Right-align Labels Show Function Key Values Right-align Numeric Labels Hide Function Key Buttons Hide All Function Key Buttons Compress Program Buttons Auto-Dismiss Host Message Dialog Compress Whitespace, except in Tables/Group Boxes Show a More Detail icon on the button Show an Information Icon on the button Show an Alert Icon on the button Show an Error Icon on the button Show OK button Show Next button	No value required.
Set White Text Colour Set Red Text Colour Set Blue Text Colour Set Cyan Text Colour Set Yellow Text Colour Set Pink Text Colour	Select a RGB color value using the standard Infor Design System color picker.
Add Window Title Area	Select a rectangular area for the Window Area.
Publish Message to Infor Ming.le™	Use the prompt button to define the message properties. See the Publishing Messages to Infor Ming.le™ section of the manual for more details on using Message To Publish dialog.

Action	Description
Show a Widget	Use the prompt button to select the Widget that will be displayed, along with how it can be dismissed from the display. See the *Show a Widget* section of the manual for more details.
	An additional automatic close option is available when used from Global Rules; *Once Global Rule is no longer True*. Select this automatic close option to control the display the Widget based on the result of the test(s) defined for this Rule.
Apply a Field Format to any matching Output Field	Use the prompt button to select the Field Format that will be used from a list of pre-defined and user-defined Field Formats. See the *Applying a Field Format to a Label Field* section of the manual for more details.
Apply a Hyperlink Definition to any matching Output Field	Use the prompt button to select the Hyperlink Definition that will be used from a list user-defined Hyperlink Definitions. See the *Applying a Hyperlink Definition to a Label Field* section of the manual for more details.
Set the 5250 AnyWhere Emulator Font Width Adjustment	Enter a valid decimal value.
Add System Manager Data to Window Title Add System Manager Data to Tab Title	Use the prompt button to select one or more items of pre-defined System Manager information (e.g. Company, Company Description, Environment, Environment Description etc.).

When the *Value* field is read-only, select the prompt icon ✐ to open the relevant *Select* dialog for the current *Action* selection.

Here are some examples…

1) Where a numeric. decimal or string value is required…

Edit Action

Action

Clip Top Lines ▾

Value

[   ] ✎

Cancel   **Apply**

2) Where no value is required…

Edit Action

Action

Compress Buttons ▾

Cancel   **Apply**

3) Where the value is prompt-able…

Edit Action

Action

Set Yellow Text Colour ▼

Value

[   ] ✎

| Cancel | Apply |

Select *Apply* to accept this Action or select *Cancel* to discard the changes.

If an Action was created, the *Actions* grid within the *Edit Rule* dialog will be updated with the new details, e.g.

Actions   + ✎ 🗑

Action	Value
Set Yellow Text Colour	57% Red, 86% Green, 69% Blue

If you select an item within the *Actions* grid, a more verbose description of the Action is displayed, e.g.

Actions   + ✎ 🗑

Action	Value
Set Yellow Text Colour	57% Red, 86% Green, 69% Blue

Set the colour of 5250 Yellow text to 57% Red, 86% Green, 69% Blue.

At least one Action must be defined, but you can create more than one Action per Global Rule. Each Action will be performed in the order shown in the grid.

To edit an existing Action, select the Action within the *Actions* grid and then select the *Edit Action* icon 🖉 from the toolbar above the *Actions* grid. The *Edit Action* dialog will be displayed.

To remove an existing Action, select the Action within the *Actions* grid and then select the *Remove Action* icon 🗑 from the toolbar above the *Actions* grid. The Action will be removed from the grid.

Select *Apply* to accept the Global Rule or select *Cancel* to discard any changes made within the *Edit Rule* dialog.

If you select *Apply*, and there are no entries in the *Actions* grid, you will see the following message…

Error

You must define at least one Action.

Close
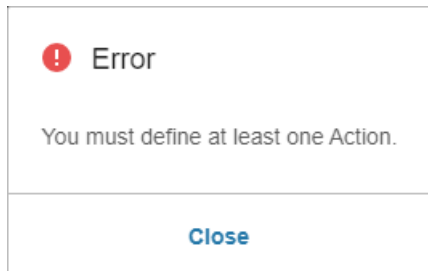
If you select *Apply*, and there is an Action that uses the *Auto-Dismiss Host Message Dialog* option, but there is no Test that uses the *Host Message Dialog Text* field, you will see the following message…

Error

You cannot use the 'Auto Dismiss Host Message Dialog' Action without at least one Test that uses the 'Host Message Dialog text' Field.

Close
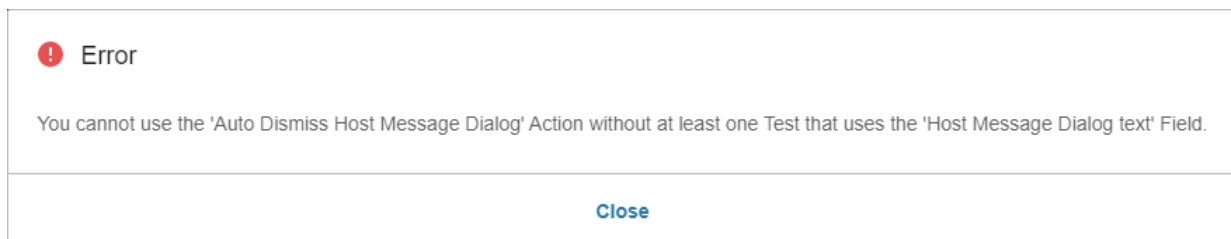
If you select *Apply*, and there is an Action that uses the *Show Widget* option and has the *Once Global Rule is no longer True* option selected, but there is no Test defined, you will see the following message…

Error

You cannot use a 'Show Widget' Action with 'Once Global Rule Test is no longer true' option enabled without at least one Test.

Close
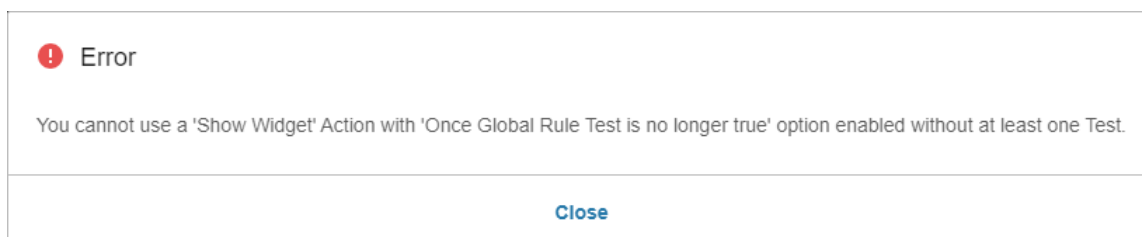
If you select *Apply*, and there is an Action that uses the *Apply a Field Format to any matching Output Field* option, but there is no Test defined that uses *Any Output Field*, you will see the following message…

⊘ Error

You cannot use the field 'Apply a Field Format to any matching Output Field' in an Action without using 'Any Output Field' in a Test.
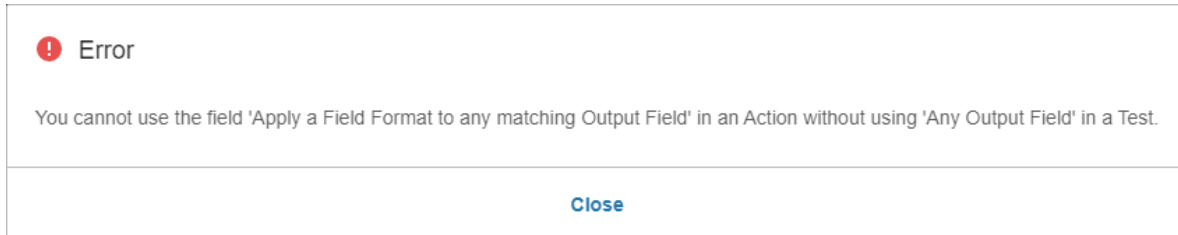
Close

If you select *Apply*, and there is an Action that uses the *Apply a Hyperlink Definition to any matching Output Field* option, but there is no Test defined that uses *Any Output Field*, you will see the following message…

⊘ Error

You cannot use the field 'Apply a Hyperlink Definition to any matching Output Field' in an Action without using 'Any Output Field' in a Test.
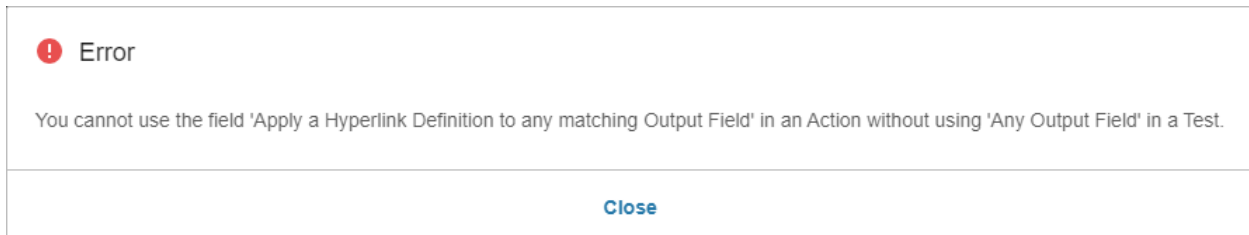
Close

In each case, select *Close* to dismiss the message and return to the *Define Rules* dialog.

On successful creation of a Global Rule, you will see the new Rule within the *Rules* grid of the *Define Rules* dialog, e.g.

Define Rules

Rules   + ✎ 🗑 🗐

When the current language is One Of Czech, Polish, Russian then set the colour of 5250 Yellow text to 16% Red, 59% Green, 92% Blue

| Cancel | Apply |
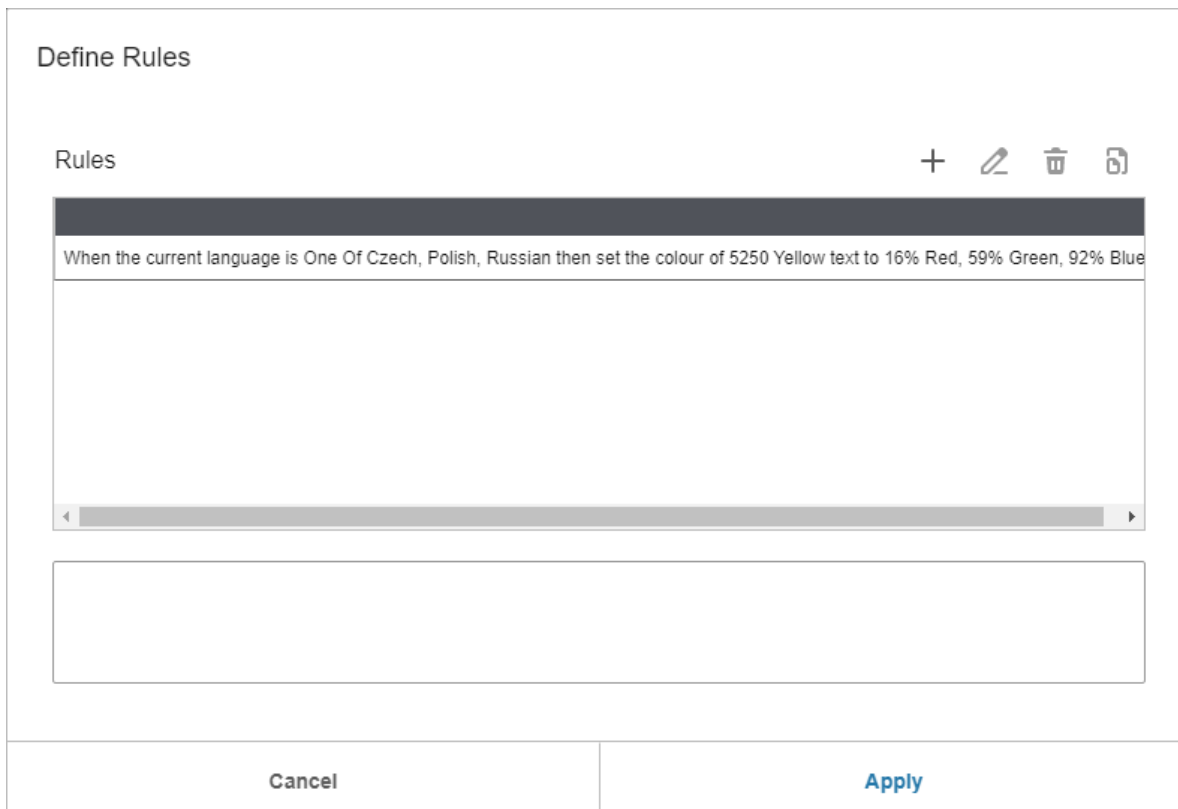
If you select an item within the *Rules* grid, a more verbose description of the Global Rule is displayed below the grid, e.g.

Define Rules

Rules   +   ✎   🗑   🗐

When the current language is One Of Czech, Polish, Russian then set the colour of 5250 Yellow text to 16% Red, 59% Green, 92% Blue

When the current language is One Of Czech, Polish, Russian then set the colour of 5250 Yellow text to 16% Red, 59% Green, 92% Blue.

Cancel	**Apply**
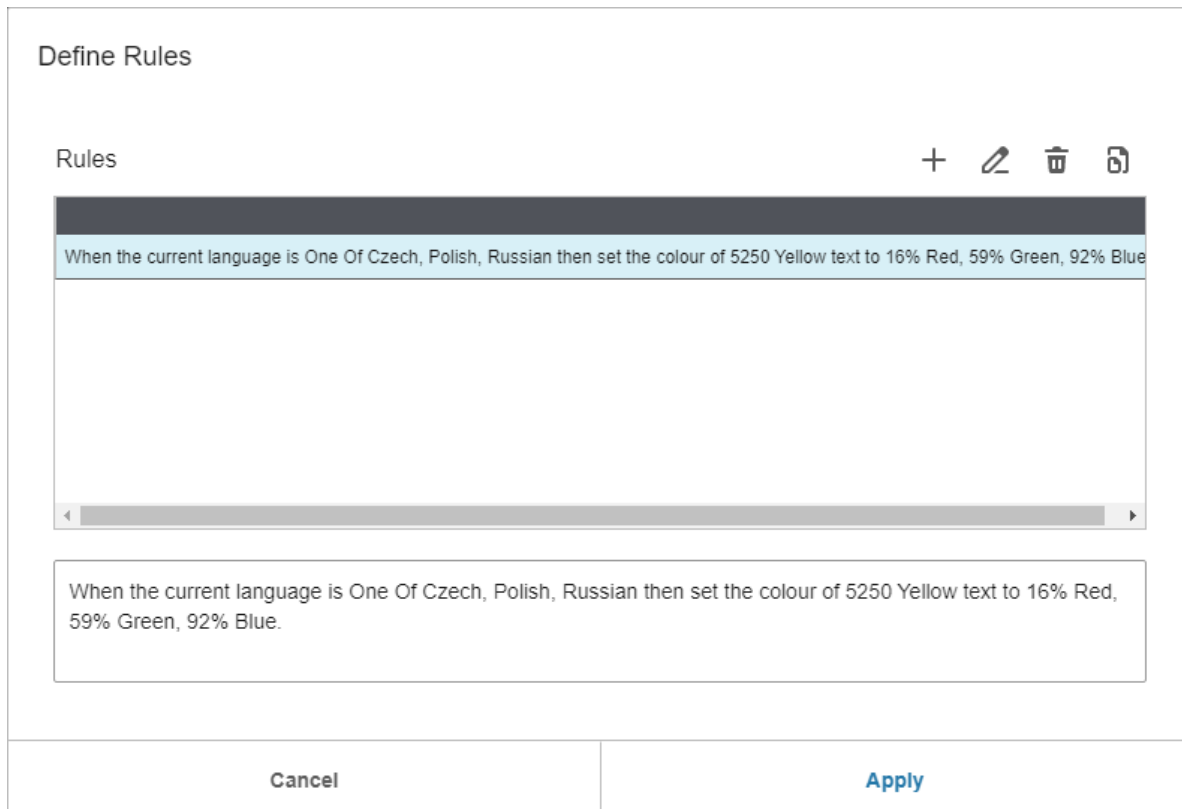
You may create as many Global Rules as you like. They will be applied, in the order they appear in the *Rules* grid, every time a System i application task is launched.

To edit an existing Global Rule, select the Rule within the *Rules* grid and then select the *Edit Rule* icon ✎ from the toolbar above the *Rules* grid. The *Edit Rule* dialog will be displayed.

To remove an existing Global Rule, select the Rule within the *Rules* grid and then select the *Remove Rule* icon 🗑 from the toolbar above the *Rules* grid. The Global Rule will be removed from the grid.

To duplicate an existing Global Rule, select the Rule within the *Rules* grid and then select the *Duplicate Rule* icon 🗐 from the toolbar above the *Rules* grid. The selected Global Rule will be duplicated within the grid. The duplicate Global Rule will be added to the bottom of the grid.

Select *Apply* to accept the Global Rules or select *Cancel* to discard any changes.

If Designer Versioning is enabled for the current Infor System I Workspace AnyWhere Profile, you may see an additional dialog if you select *Apply* to accept the new Global Rules. For more details, see the Adding Version Comments section.

Because Global Rules are defined across multiple screens, you can edit them, within Designer, from any IBM i application screen. The Global Rules are held separately from the individual screen designs.

In the same way as two people cannot design a screen at the same time, Infor System I Workspace AnyWhere will prevent two people designing Global Rules at the same time. If you select the *Global – Define Global Rules* menu option, and another user is designing them, you will see the following message…
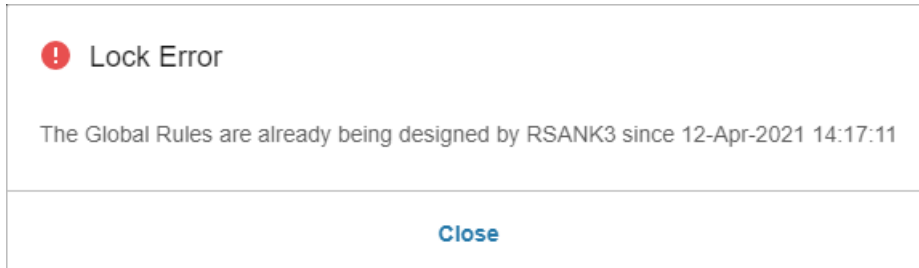
Select *Close* to close the message.

If another user has updated the Global Rules since you logged into Infor System I Workspace AnyWhere, the latest copy of the Global Rules will be downloaded to your PC before you begin changing them.

> **Caution:** We recommend that you use Global Rules to define the default look & feel of IBM i Applications for you users before you deploy Infor System I Workspace AnyWhere to them.

> **Caution:** Screen Design Templates may be available for your Infor IBM i product for use with Infor System i Workspace AnyWhere. These will come with a set of pre-defined Global Rules designed to enhance your Infor System i Workspace AnyWhere experience. These can be modified post-installation. See the Screen Design Templates section for more details.

Global Lists

Global Lists are groups of value - description pairs that can be applied to fields within IBM i application screens to provide a dropdown list of options for the user to select from. Using Global Lists can improve the usage of your IBM i application screens by providing more descriptive text for user input options (e.g. instead of the user having to remember that option code DL will delete a record, you can provide the text "Delete This Record" within a dropdown list).

Before you can apply a dropdown list to a IBM i application screen, you must first create one or more Global Lists. Lists are created globally, rather than on a screen-by-screen basis, as IBM i applications often re-use the same set of options over multiple screens. Therefore, you can create the list once and then apply it to as many screens as you like.

To begin creating a Global List, select the *Global – Define Global Lists* menu item. *Define Lists* dialog will display, e.g.

Define Lists

Lists (0 results)   + ✎ 🗑 ◳ 🔍 ⋯

Name ▲	Alias
[A] ▾	[A] ▾

⚠

No Data Available

| Cancel | Apply |

The *Lists* grid contains a list of all the Global Lists defined for all application screens.

To create a new Global List, select the *Add List* icon + from the toolbar above the grid and select *Add List* from the Context Menu. The *Edit List* dialog is displayed, e.g.

Edit List

Name:

Alias:

List Items   + ✎ 🗑

Value ⇕	Description

No Data Available

Cancel	Apply

The *Name* field is the unique identifier for this Global List.

The *Alias* field is the description for this Global List.

The grid contains all the *Value – Description* pairs of data associated with the Global List.

To create a new *Value – Description* pair select the *Add Item* icon + from the toolbar above the grid. The *Edit List Item* dialog will display, e.g.

Edit List Item

Value:

+ ✎ 🗑

Cancel	Apply

In the *Value* field, enter the actual data that will be inserted into the IBM i application field.

The List Item Text values are held within the list box. The behaviour of defining List Item Text values in the *Edit List Item* dialog is like that of the *Edit Field Text* dialog, so you can either create a single List Item Text value for all languages or have language specific List Item Text values.

Initially, there will be no List Item Text values defined, and the list box in the dialog will be empty.

To add a new List Item Text value, click the *Add List Item Text* icon ╋. The *Add List Item Text* dialog will open, e.g.

Use the *Locale* field to select the language for this List Item Text value or use the **All Languages** option to apply the List Item Text value to the field regardless of what language the user has signed in to Infor System I Workspace AnyWhere as.

Use the *Description* field to change the text of the field to a new value.

Click *Cancel* to close the *Add List Item Text* dialog and abort any changes.

Click *Apply* to close the *Add List Item Text* dialog and update the main *Edit List Item* dialog list with the new entry, e.g.

You can add further List Item Text values, for different languages, e.g.

Edit List Item

Value:

[   ]

+ ✎ 🗑

All Languages: 30-Day Quote for Sales Order

French: Devis de 30 jours pour la commande client

Italian: Preventivo di 30 giorni per ordine di vendita

Cancel   **Apply**

Caution: Once a List Item Text value has been created for a language, you will not be able to define another List Item Text value for the same field for that language.

To change an existing List Item Text value, first click on the List Item Text value in the list to select it, which will highlight the selected row, e.g.

Edit List Item

Value:

[   ]

+ ✏ 🗑

All Languages:	30-Day Quote for Sales Order
French:	**Devis de 30 jours pour la commande client**
Italian:	Preventivo di 30 giorni per ordine di vendita

Cancel   Apply

Once selected, to change the List Item Text value, click the *Edit List Item Text* icon ✏ . The *Edit List Item Text* dialog will open, e.g.

Edit List Item Text

Locale

[French   ▾]

Description

[Devis de 30 jours pour la commande client   ]

Cancel   Apply

When editing an existing List Item Text value, the *Locale* field is displayed, but cannot be changed.

The behaviour of the *Description* field and the *Cancel* and *Apply* actions is the same as in the *Add List Item Text* dialog described above.

To delete a List Item Text Value, select the desired item within the list of tooltips in the *Edit List Item* dialog, so that it is highlighted, and then select the *Remove List Item Text* icon 🗑 . The highlighted row will be removed from the list.

If either of the *Edit List Item Text* or *Remove List Item Text* icons are clicked when no row in the list of tooltips in the *Edit List Item* dialog is highlighted, then no change will be performed.

Select *Cancel* to close the *Edit List Item* dialog without making any changes.

Select *Apply* to close the *Edit List Item* dialog and confirm the changes.

If you select *Apply* without entering a value, you will see the following message…

🛑 Error

You must enter a Value.

Close

Select *Close* to close the message.

On successful creation of an Item, you will see it within the grid in the *Edit List* dialog, e.g.

Edit List

Name:

Quotation Types

Alias:

List Items   +　✎　🗑

Value ⬍	Description
30	30-Day Quote For Sales Order

Cancel	Apply

To amend a Global List Item, select the Item within the grid and select the *Edit Item* icon ✐ from the toolbar above the grid. The *Edit List Item* dialog will be displayed.

To remove a Global List Item, select the Item within the grid and select the *Remove Item* icon 🗑 from the toolbar above the grid. The List Item will be deleted and removed from the grid.

You must define at least one *Value – Description* pair but there is no upper-limit on the number of Global List Items you may add.

Select *Apply* to accept the changes or select *Cancel* to discard them.

If you select Apply, and no name for the list has been defined, you will see the following message…

🛑 Error

You must enter a Name.
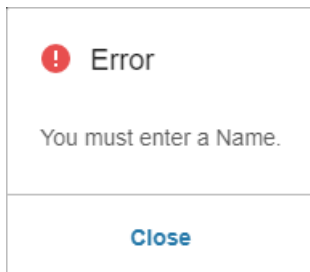
Close

If you select *Apply,* and there are no entries within the grid, you will see the following message…

🛑 Error

You must define at least one Item.
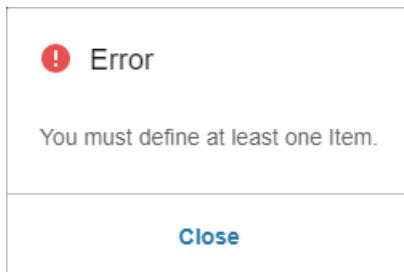
Close

If you use a Global List name that is already in use, you will see the following message…

🛑 Error

Global List name already used. Please select a different one.
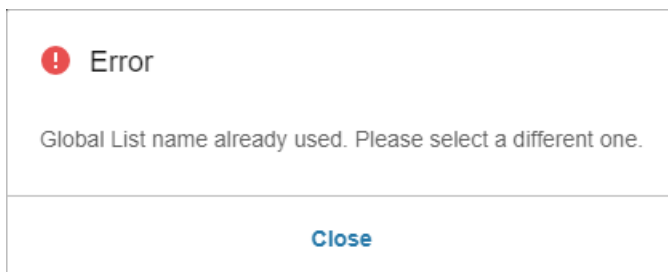
Close

Select *Close* to close either of these messages.

If *Apply* was selected in the *Edit List* dialog, the *Define List* dialog will be updated with the new list, e.g.

Define Lists

Lists (1 result)   + ✎ 🗑 📄 🔍 ⋯

Name ⬍	Alias
[A] ▾	[A] ▾
Quotation Types	Quotation Types For Sales Orders

Cancel   **Apply**

To amend a Global List, select the Global List within the grid and select the *Edit List* icon ✎ from the toolbar above the grid. The *Edit List* dialog will be displayed.

To remove a Global List, select the Global List within the grid and select the *Remove List* icon 🗑 from the toolbar above the grid. The complete list will be deleted and removed from the grid.

If you try to remove a Global List that is being used by one or more panels, you will see the following error message…

🛇 Error

This List cannot be deleted as it is used within one or more screen designs.

Close

To create a new Global List based on an existing one, click on the existing list and select the *Duplicate List* icon 📄 from the toolbar above the grid. A new list will be added to the grid with "Copy of" inserted before the Global List name to avoid clashing with the existing list, E.g.

Any items associated with the original Global List are copied to the duplicate.

To find out where a Global List is being used within your IBM i application screen designs, click on the existing list and select the *Used By Panels* icon Q from the toolbar above the grid. The *Screens Where List {Global List Name} Is Used* dialog will display, e.g.

The grid contains the Screen ID (Magic Number) of each IBM i application where this Global List is used along with any Version Comments associated with that screen to aid identification.

> **Caution:** If the Screen ID ends with an asterix symbol, it means that is the Screen ID of the current screen you are designing, and it contains one or more instances of the Global List.

Select *Close* to close the dialog.

Within the *Define Lists* dialog, the lists can be filtered by using the edit fields above each grid column, e.g. to match all Global List names that contain the word "Test"…

Name ⬍			Alias	
[A] ▾	Test		[A] ▾	

Enter a value into the field, and to apply the filter, either pause a few seconds or press the Enter key. The *Define Lists* dialog will be updated to show only the Global Lists that have an item with a Name or Alias that, by default, "contains" the content of the filter. Use the dropdown list to the left of each edit field to change the filter type.

To clear any filters, click the ⋯ icon on the toolbar above the grid and select the *Clear Filter* option.

Select *Apply* to accept any changes you have made to the Global Lists.

Select *Cancel* to discard the changes.

If Designer Versioning is enabled for the current Infor System I Workspace AnyWhere Profile, you may see an additional dialog if you select *Apply* to accept the new Global Lists. For more details, see the Adding Version Comments section.

Because Global Lists are defined across multiple screens, you can edit them, within Designer, from any IBM i application screen. The Global Lists are held separately from the individual screen designs.

In the same way as two people cannot design a screen at the same time, Infor System I Workspace AnyWhere will prevent two people designing Global Lists at the same time. If you select the *Global – Define Global Lists* menu option, and another user is designing them, you will see the following message…

🛑 Lock Error

The Global Lists are already being designed by RSANK3 since 13-Apr-2021 10:04:59

Close

Select *Close* to close the message.

If another user has updated the Global Lists since you logged into Infor System I Workspace AnyWhere, the latest copy of the Global Lists will be downloaded to your PC before you begin changing them.

> **Caution:** Screen Design Templates may be available for your Infor IBM i product for use with Infor System i Workspace AnyWhere. These will come with a set of pre-defined Global Lists designed to enhance your Infor System i Workspace AnyWhere experience. These can be modified post-installation. See the Screen Design Templates section for more details.

Convert a Field to a Dropdown List

Converting an Edit or Label field into a Dropdown List allows you to pre-define and/or control the values that can be entered/displayed in that field and also give more meaningful descriptions for variant values (E.g. instead of ACC the user would see the text Account).

In the 5250 AnyWhere Emulator, Dropdown List fields are non-editable. At run-time, for a Dropdown list, a button is added to the right of the field that can be pressed to open the Dropdown List. This button is only displayed/enabled if the underlying field is editable (e.g. not a Label and not set as Read-Only by the application or by Designer)

To convert a field to a Dropdown List, select the field and then select the *Fields – Show as Dropdown List* option or right-click on the field and select *Show as Dropdown List*.

Before this option becomes available, you must create one or more lists within the *Global – Define Global Lists* option.

This option will not be available if you have applied another field style to the field (e.g. a field cannot be a Dropdown List and a Date field).

The *Edit Dropdown Options* dialog will display, e.g.

Edit Dropdown Options

Global List To Use:

Quotation Types (Quotation Types For Sales Orders) ▼   ✎

Cancel   **Select**

The *Global List To Use* field, contains a complete list of all the *Dropdown List* definitions currently available. Select one list from the dropdown to apply to this field.

If you have Screen Design Templates (SDT) enabled, any lists that are held in the SDT will have an asterisk next to their name to differentiate them from the lists you have created.

Click the ✎ icon next to the *Global List To Use* field to edit the selected Global List. If another user is currently changing the Global List definitions, you will see the following message…
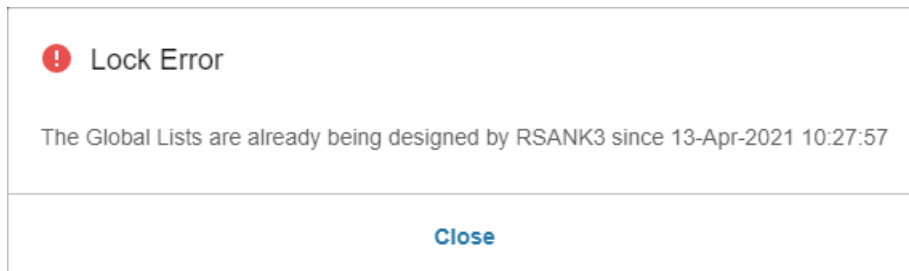
Select *Close* to close the message.

The Global List selected in the *Global List To Use* field will be highlighted within the *Define Lists* dialog, e.g.
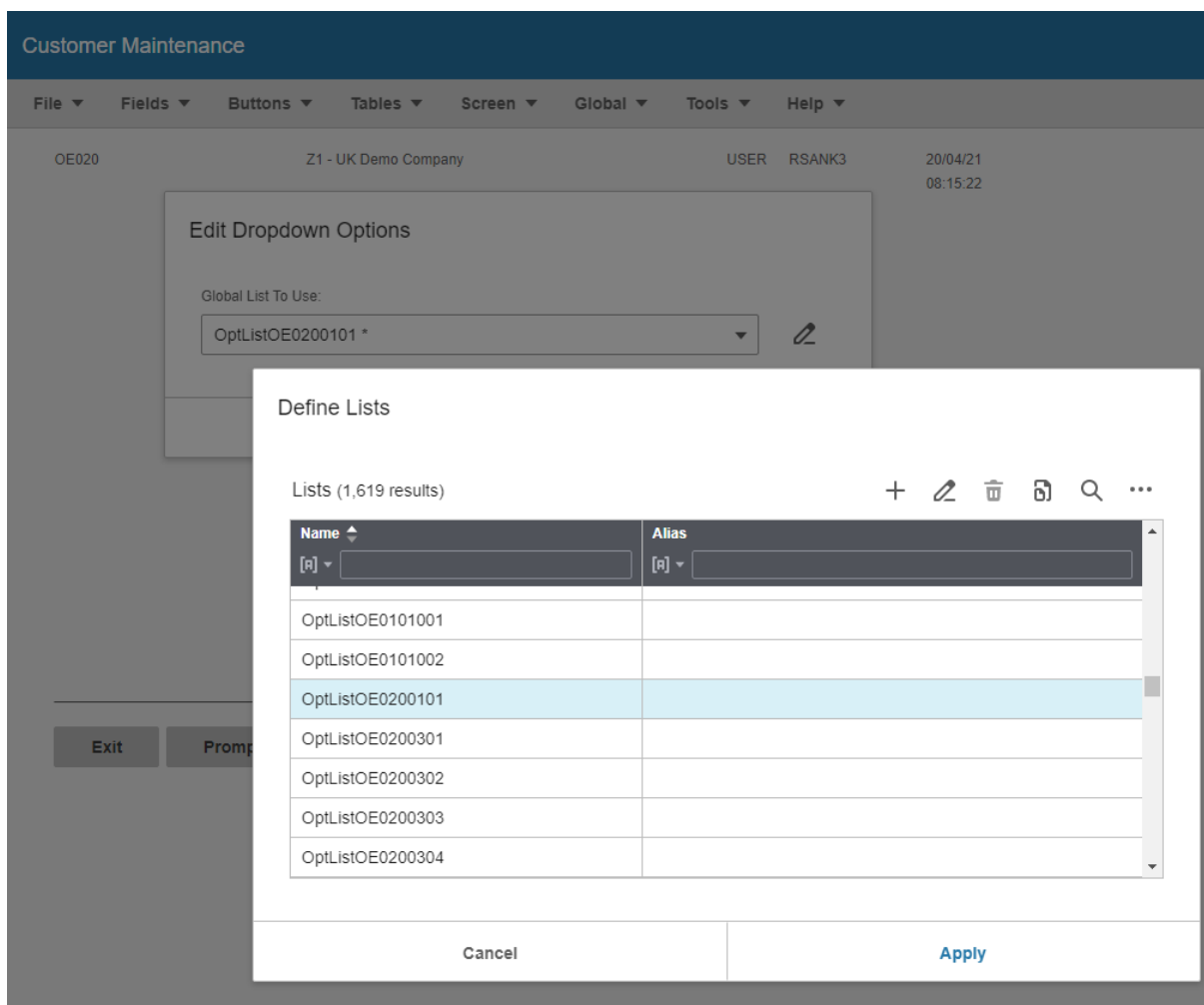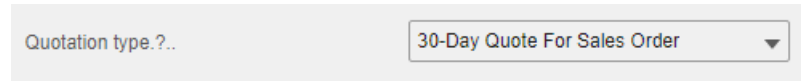
The current selection from the *Global List To Use* field is highlighted as it is most likely that this is the Global List that you will want to amend, but you can still select other lists to amend, create new, or perform any other Global List maintenance too, as described in the previous section.
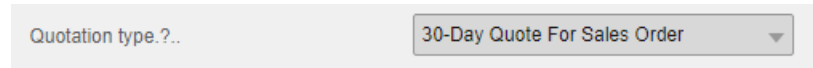
Click *Apply* or *Cancel* to return to the *Edit Dropdown Options* dialog.

In the *Edit Dropdown Options* dialog, click *Select* to apply the Dropdown List or *Cancel* to discard it.

If you chose *Select*, the Dropdown List style will be applied to the field, e.g.

Quotation type.?..	30-Day Quote For Sales Order ▼

If the dropdown list is applied to a field that is either a Label field or Read-Only Edit field, the original text from of the field will be used to match a value within the selected Global List, and if a match is found, at run-time, the description of the Global List will be displayed within the field in place of its original text, e.g.

Quotation type.?..	30-Day Quote For Sales Order ▼

If you wish to change the Dropdown List properties, select the field with the left mouse button and then select the *Fields – Dropdown List Properties* menu item or, press the right mouse when the mouse is over the field and select *Dropdown List Properties* from the context menu. The *Edit Dropdown Options* dialog is shown.

If you change the content of the Global List items, you do NOT need to go back and re-apply the Dropdown List style. At run-time, the Dropdown List will read the latest set of definitions from the associated Global List.

Remove Dropdown List Style

To remove the Dropdown List style, select the Label or Edit field with the left mouse button and then select the *Fields – Show as Dropdown List* menu item (which should be checked) or, press the right mouse when the mouse is over the field and select *Show as Dropdown List (*which should be checked*)* from the context menu. The field will be restored to its original style.

Designer Variables

Designer Variables provide a pseudo-programming capability within Designer. A Designer Variable is a simple per-user run-time storage area to which you can save a value, such as the content of an Edit field. You can then use the Designer Variable in a variety of ways, such as a test in a Screen/Global/Validation Rule or to pre-fill an Edit field.

Before you can use Designer Variables within your System i application screen designs, you must first create one or more of them. Designer Variables are created globally, rather than on a screen-by-screen basis.

To begin creating a Designer Variable, select the *Global – Define Global Variables* menu item. The *Designer Variables* dialog will display, e.g.

Designer Variables

Variables   + ✎ 🗑 ⎘

No Data Available

Cancel   **Apply**
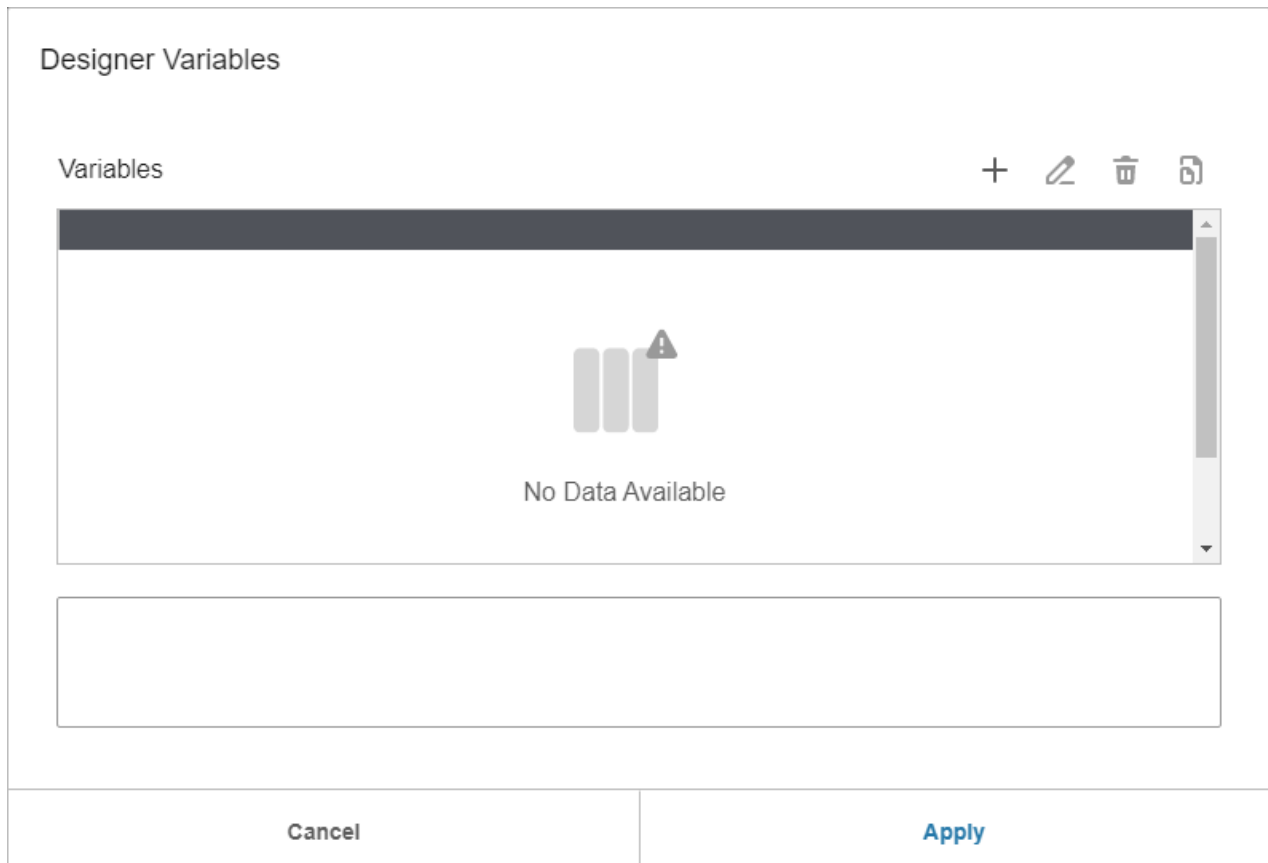
To create a new Designer Variable, select the *Add Variable* icon ✛ from the toolbar above the grid. The *Edit Designer Variable* dialog is displayed, e.g.

The *Name* field is the unique identifier for this Designer Variable.

The *Description* field is optional and can be used to give additional information as to what this Designer Variable is for and where it will be used.

Within Infor System I Workspace AnyWhere, multiple sessions can be executed at the same time. If the *Session Specific* check-box field is checked, each 5250 AnyWhere Emulator session will get a unique instance of the Designer Variable and the data content will be private to that session. If the *Session Specific* field is unchecked, a single instance of the Designer Variable will be created and shared across all sessions.

Check the *Clear On Use* checkbox field if you want the Designer Variable to be reset every time it is read (in any context).

Check the *Clear On Task Start* checkbox field if you want the Designer Variable to be reset every time a new IBM i task is started. This setting is only applied if the Designer Variable is Session Specific.

Check the *Do not Save Blank/Empty Field Data* checkbox field if you want to prevent the Designer Variable being updated when the incoming data is blank or unset.

Check the *Do not Apply Blank/Empty Field Data* checkbox field if you want to prevent the Designer Variable being used as a field value when it contains blank data or is unset.

The *Default Value* fields are optional values that will be used if the Designer Variable is read before it has been assigned a value. You can either enter a value into the edit field or select one of the dynamic values that are provided in the dropdown list. If you select a dynamic value from the dropdown list, the edit field will be disabled. To re-enable the edit field to enter your own default

value, select the "blank" option within the dropdown list of dynamic values. The supported dynamic values are…

Value	Description
System Manager Date – 2 digit year	A date value, with no separators between day, month, and year values, based on the setting of the user-profile in system Manager. The year portion will be just two digits, e.g. if the System Manager date format is M, for 25th December 2014, the default value of the Designer Variable will be 122514.
System Manager Date – 4 digit year	A date value, with no separators between day, month, and year values, based on the setting of the user-profile in system Manager. The year portion will be four digits, e.g. if the System Manager date format is M, for 25th December 2014, the default value of the Designer Variable will be 12252014.
System Manager Date with separators – 2 digit year	A date value, with separators between day, month and year values, based on the setting of the user-profile in system Manager. The year portion will be just two digits, e.g. if the System Manager date format is D, for 25th December 2014, the default value of the Designer Variable will be 25/12/14.
System Manager Data with separator – 4 digit year	A date value, with separators between day, month and year values, based on the setting of the user-profile in system Manager. The year portion will be just two digits, e.g. if the System Manager date format is Y, for 25th December 2014, the default value of the Designer Variable will be 2014/12/25.
Current Date in Client PC Locale Format	A date value formatted using the user's current "Long Date" Locale format, e.g. 12 November 2014
Current Time in Client PC Locale Format	A time value formatted using the user's current "Long Time" Locale format, e.g. 12:10 AM. If the Designer Variable is not assigned a value, then each time it is read, the default value will be updated to current time.
Current Time in HH:MM format	A time value formatted as hours and minutes, e.g. 12:10. If the Designer Variable is not assigned a value, then each time it is read, the default value will be updated to current time.
System Manager User ID	The System Manager user profile ID
System i Server Name	The System i Server name (read from the Infor System I Workspace AnyWhere Configuration)
Client PC Name	The user's PC name (as defined in DNS)
Company	System i Manager Company code. If the Designer Variable is not assigned a value, then each time it is read, the default value will be updated to current company code used to start the task.

Value	Description
Environment	System i Manager Environment code. If the Designer Variable is not assigned a value, then each time it is read, the default value will be updated to current environment code used to start the task.
Local Data Area (LDA)	First 1024 characters of the System Manager Local Data Area (LDA). If the Designer Variable is not assigned a value, then each time it is read, the default value will be updated to current LDA used to start the task.
Application Code	System Manager Application code. If the Designer Variable is not assigned a value, then each time it is read, the default value will be updated to current application code used to start the task.
System i Device Name	IBM i 5250 Telnet device name, if available.

Some of the default values that provide date values support an offset value. If you select one of these options, the *Offset (days)* numeric field will be enabled, E.g.

Enter a numeric offset value or use the up/down controls to change the offset value. The offset value can be positive or negative. The offset value will be applied to the date at the point that it is used (e.g. in the above example, if the date is 31st May 2020, the default value would be 310520)

Select *Apply* to Save the Designer Variable or *Cancel* to discard the changes.

If you select *Apply* and you have not given the variable a name you will see an error message, e.g.
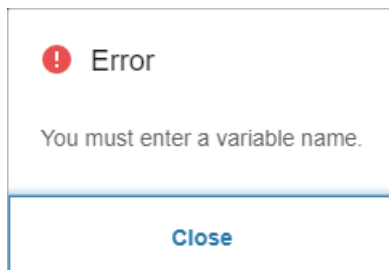
Click *Close* to close the error message.

If *Apply* was selected in the *Edit Designer Variable* dialog, the *Designer Variables* dialog will be updated with the new list, e.g.
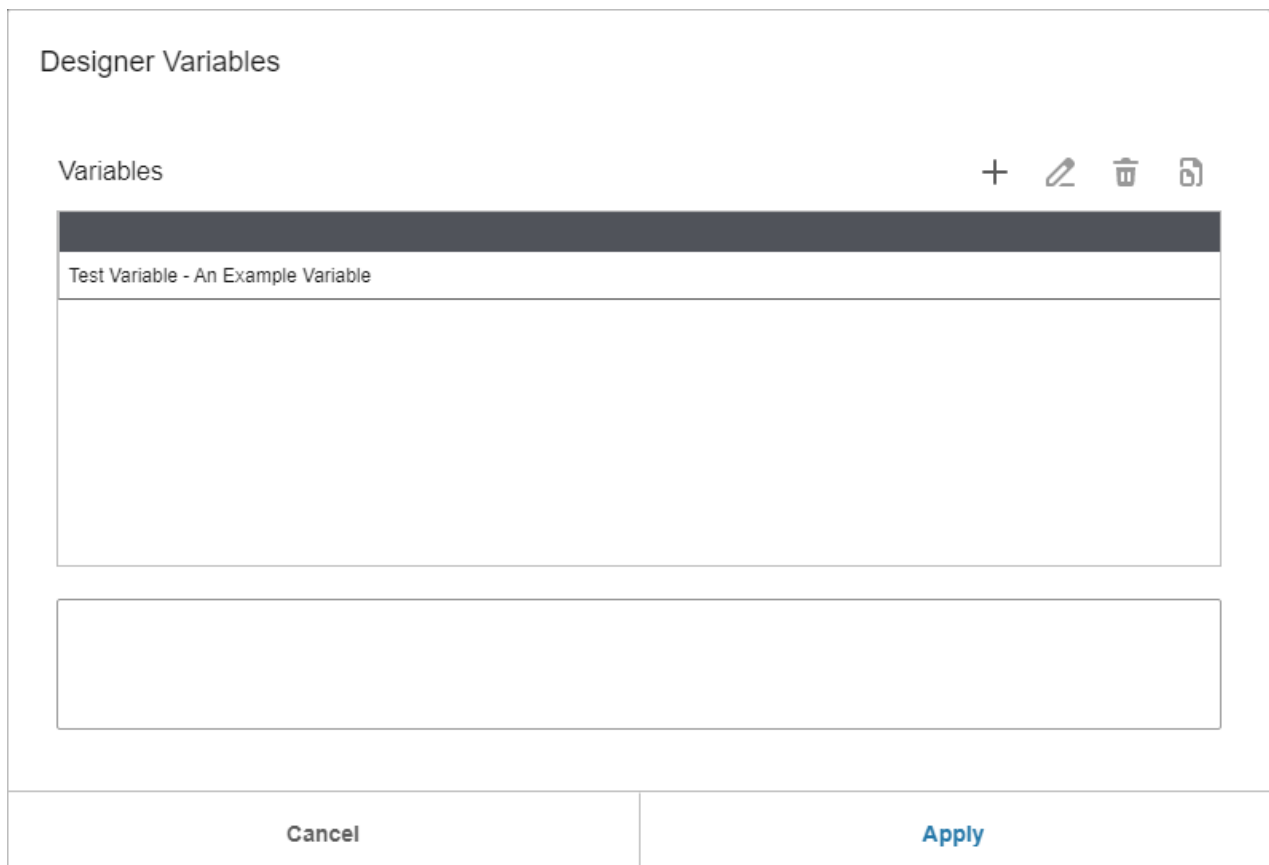
If you select an item within the *Variables* grid, a more verbose description of the Designer Variable and its properties is displayed, e.g.
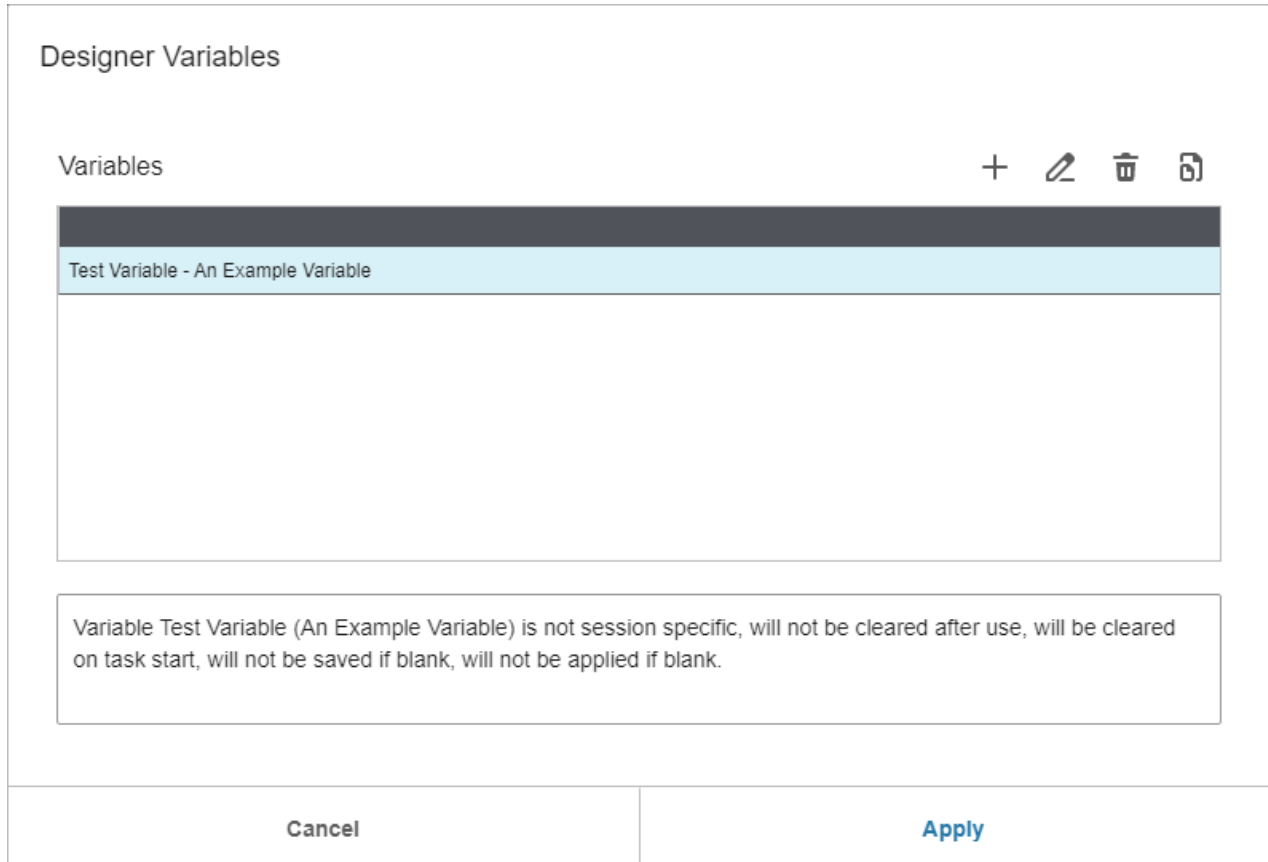
You may create as many Designer Variables as you like.

To edit an existing Designer Variable, select the Designer Variable within the *Variables* grid and then select the *Edit Variable* icon ✎ from the toolbar above the *Variables* grid. The *Edit Designer Variable* dialog will be displayed.

To remove an existing Designer Variable, select the Designer Variable within the *Variables* grid and then select the *Remove Variable* icon 🗑 from the toolbar above the *Variables* grid. The Designer Variable will be removed from the grid.

If you attempt to remove a Designer Variable that is in use in any screen design, you will see an error message, e.g.
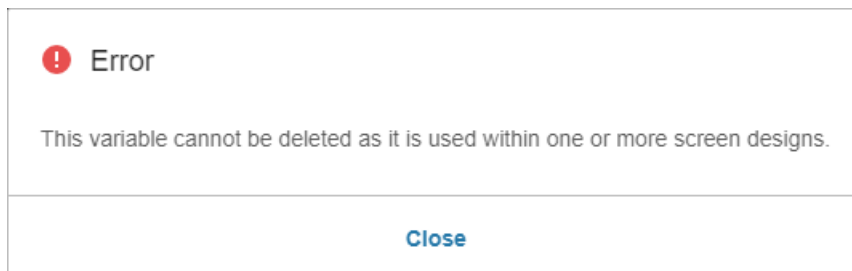
Select *Close* to cancel the message. You will not be able to remove the Designer Variable until it is no longer used within any screen design.

You can duplicate an existing Designer Variable by right-clicking on the Designer Variable in the *Variables* grid and select the *Duplicate Variable* menu item from the Context Menu. A copy of the Designer Variable will be created, e.g.

Designer Variables

Variables   +   ✐   🗑   🗐

Test Variable - An Example Designer Variable

Copy of Test Variable - An Example Designer Variable

Variable Copy of Test Variable (An Example Designer Variable) is not session specific, will not be cleared after use, will not be cleared on task start, will not be saved if blank, will not be applied if blank.

Cancel   Apply

Select *Apply* to accept the Designer Variables in the list or select *Cancel* to discard any changes.

If Designer Versioning is enabled for the current Infor System I Workspace AnyWhere Profile, you may see an additional dialog if you select *Apply* to accept the new Designer Variables. For more details, see the Adding Version Comments section.

Because Designer Variables are defined across multiple screens, you can edit them, within Designer, from any IBM i application screen. The Designer Variables are held separately from the individual screen designs.

In the same way as two people cannot design a screen at the same time, Infor System I Workspace AnyWhere will prevent two people changing Designer Variables at the same time. If you select the *Global – Define Global Variables* menu option, and another user is designing them, you will see the following message…
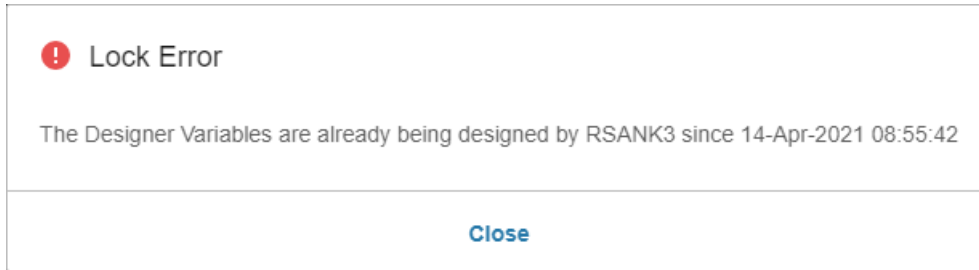
Select *Close* to close the message.
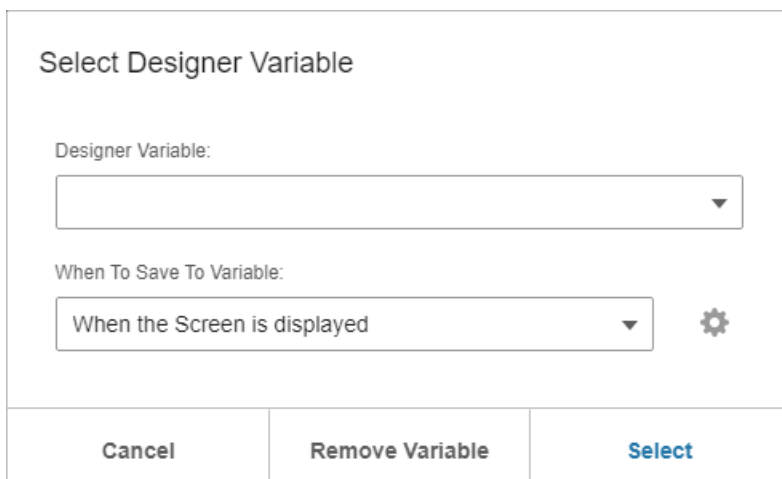
If another user has updated the Designer Variables since you logged into Infor System I Workspace AnyWhere, the latest copy of the Designer Variables will be downloaded to your PC before you begin changing them.

> **Caution:** Screen Design Templates may be available for your Infor IBM i product for use with Infor System i Workspace AnyWhere. These may come with a set of pre-defined Designer Variables designed to enhance your Infor System i Workspace AnyWhere experience. These can be modified post-installation. See the Screen Design Templates section for more details.

Saving a Field to a Designer Variable

You can save the content of any Output or Edit field to a Designer Variable.

Within Designer, select any Edit or Output field and select the *Field – Save To Variable* option from the menu or right-click on the field and select *Save To Variable* from the Context Menu. The *Select Designer Variable* dialog is displayed, e.g.

The *Designer Variable* field contains a dropdown list of all Designer Variables that you have defined.

The *When To Save To Variable* field contains three options for specifying when the Designer Variable is stored.

Action	Description
When the Screen is displayed	The content of the field is saved into the Designer Variable when the IBM i server sends a new instance of this screen to the client.
When any Action is performed	The content of the field is saved into the Designer Variable when the user presses any key that will cause data to be transmitted to the IBM i server (e.g. Function Keys, Enter, Page Up/Down)
When a specific Function Key is pressed	The content of the field is saved into the Designer Variable when the user presses a named key (or keys) that will cause data to be transmitted to the IBM i server.

When the *When to Save To Variable* field is set to *When a specific Function Key is pressed,* the prompt icon next to the field ⚙ becomes enabled. Click this to choose which function keys will cause the Designer Variable to be stored. The *Select Keys* dialog will open.

Select Keys

[▼]

| Cancel | Select |

Within the *Select* dialog, choose the key(s) you want from the dropdown list by clicking the checkbox next to the named key entry.

Choose *Select* to use the selections or select *Cancel* to discard the changes.

On the *Select Designer Variable* dialog, click *Select* to confirm the selected Designer Variable storage, click *Remove Variable* to remove all variable information from the field, or click *Cancel* to discard.

> **Caution:** If the *Designer Variable* field is empty, and you choose *Select* from the *Select Designer Variable* dialog, it will also remove all Designer Variable information from the field, equivalent to selecting the *Remove Variable* option.

If you choose the *When a specific Function Key is pressed* option but do not define at least one key, then an error message will be displayed when you choose the *Select* option on the *Select Designer Variable* dialog, e.g.

> ⚠ **Warning**
>
> For Event "When a specific Function Key is pressed" you must specify at least one Function Key (use the Prompt Button to the right of the field).
>
> ───
>
> **Close**
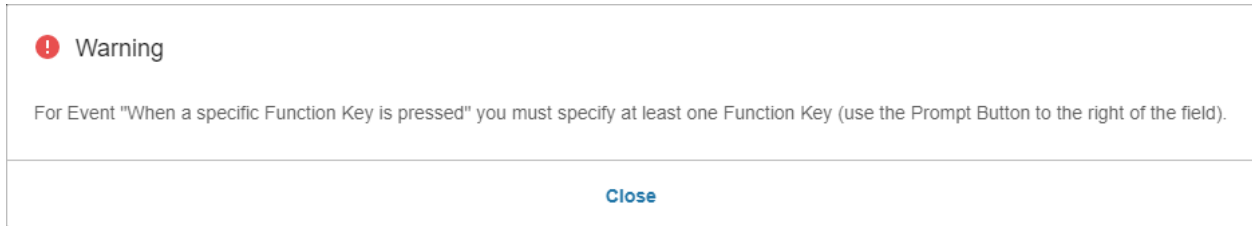
Click *Close* to dismiss the error message.

Using the Designer UI, a field can only be stored to one variable per screen.

At run-time, when the appropriate user/screen Action occurs, the content of the selected Edit or Output field will be stored to the Designer Variable you chose in the *Select Designer Variable* dialog (unless it is blank and your Designer Variable has the *Do Not Save Blank/Empty Data* option set).

Set a Field to a Designer Variable

You can set the content of any Output or Edit field from a Designer Variable.

Within Designer, select any Edit or Output field and select the *Field – Set From Variable* option from the menu or right-click on the field and select *Set From Variable* from the Context Menu. The *Select Designer Variable* dialog is displayed, e.g.

> **Select Designer Variable**
>
> Designer Variable:
>
> [▼]
>
> | Cancel | Remove Variable | **Select** |
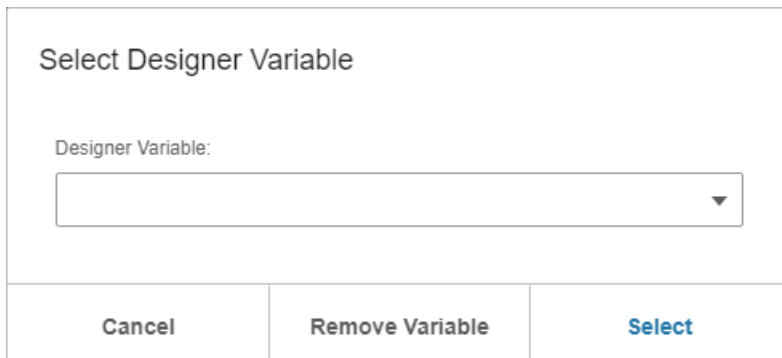
The *Designer Variable* field contains a list of all Designer Variables that you have defined.

On the *Select Designer Variable* dialog, click *Select* to confirm the selected Designer Variable, click *Remove Variable* to remove all variable information from the field, or click *Cancel* to discard.

> **Caution:** If the *Designer Variable* field is empty, and you choose *Select* from the *Select Designer Variable* dialog, it will also remove all Designer Variable information from the field, equivalent to selecting the *Remove Variable* option.

Using the Designer UI, a field can only be set from one variable per screen. You can use the same Designer Variable to update any number of Edit or Output fields (though ensure the Designer Variable does not have the *Clear On Use* option set if you wish to do this).

At run-time, when the screen is displayed, the content of the selected Edit or Output field will be set from the Designer Variable you chose in the *Select Designer Variable* dialog (unless it is blank and your Designer Variable has the *Do Not Apply Blank/Empty Data* option set). If the *Clear On Use* option is set, the content of the Designer Variable will be cleared once used to update an Edit or Output field.

Programming Screens Using Designer Variables

Designer Variables can be used as part of the Tests within Screen Rules, Screen Validation and, for non-Session Specific variables, Global Rules. You can even update a Designer Variable based on a Test against another Designer Variable.

This gives you the ability to carry out simple screen design and logic changes based on dynamic data from other parts of your system, without the need to re-code or bespoke your IBM i applications.

See the *Define a Screen Rule*, *Define Custom Screen Validation* and *Global Rules* sections for more information on how to use Designer Variables.

An example of using Designer Variables is contained within the *Example Designs* chapter.

Global Widgets

Widgets are extensions to the Infor System I Workspace AnyWhere user interface that provide complimentary functionality to the user (e.g. display an image of the current item they are ordering, list their current IBM i Spool Files).

To create a new Global Widget definition, select the *Global – Define Global Widgets* menu item. The *Widget Definitions* dialog is displayed, e.g.
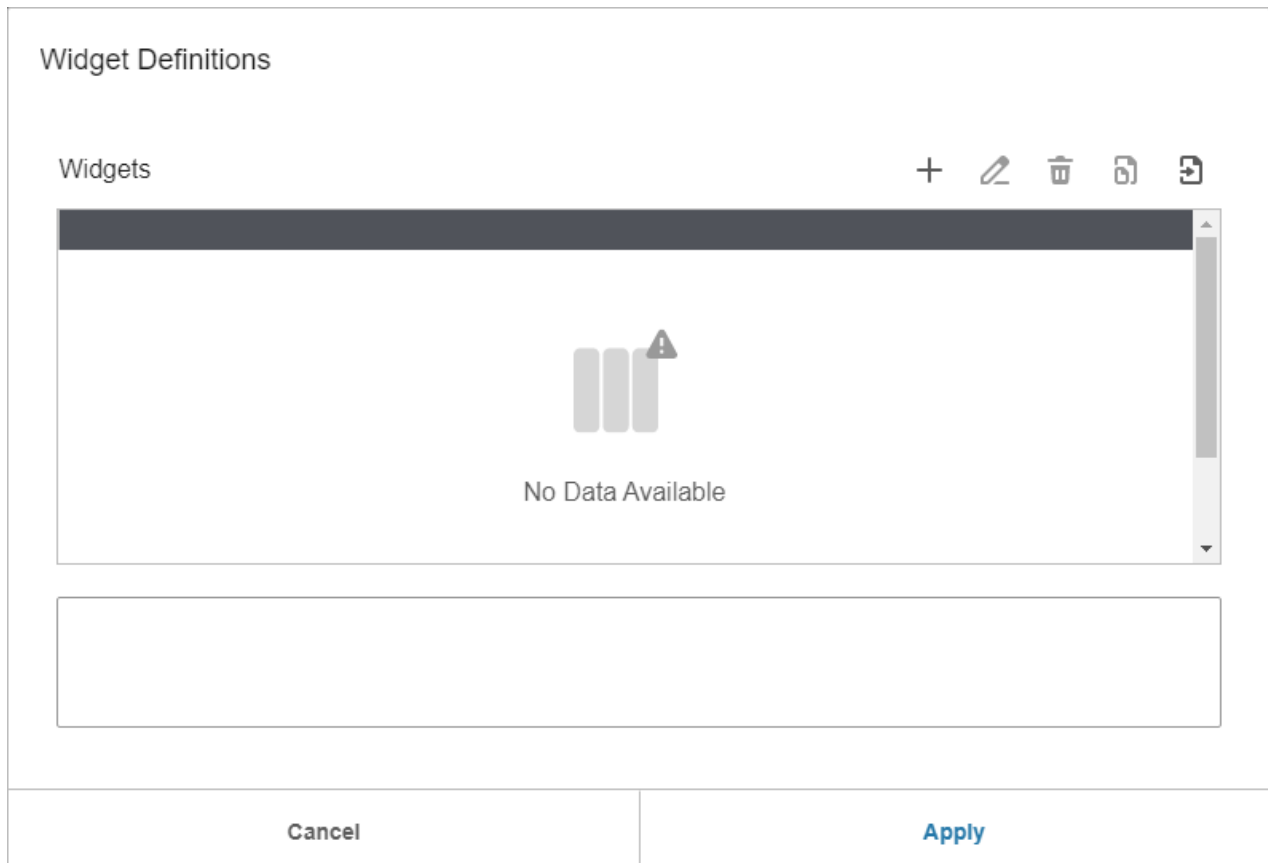
Any existing Global Widget definitions will be listed within the *Widgets* grid.

To create a new Widget definition, select the *Add Widget Definition* icon + from the toolbar above the *Widgets* grid. The *Edit Widget Definition* dialog is displayed, e.g.

Edit Widget Definition

Name:

URL:

Widget Title:

Type:

Web Page ▾

Size:

Normal ▾

Cancel   **Apply**
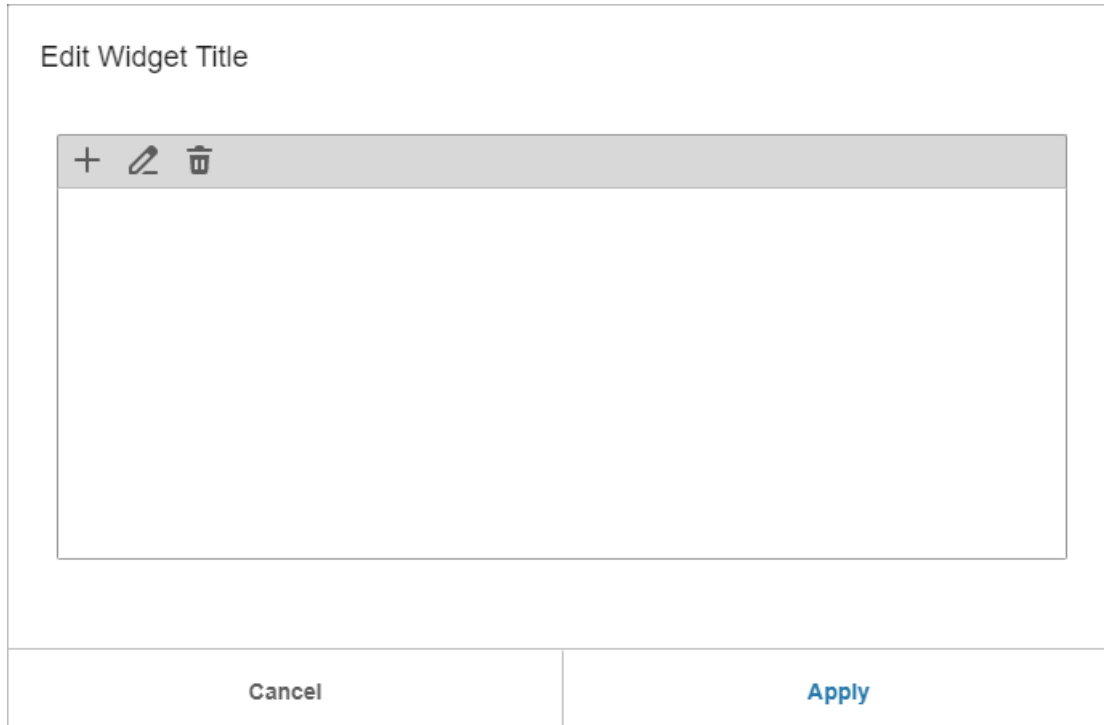
The *Name* field is the unique identifier for this Widget. It is only used within Designer for reference and can be changed without affecting any existing assignments of this Widget within your IBM i application screens.

The *URL* field is the web address of the Widget, this can be a relative address (if the Widget resides within Infor System I Workspace AnyWhere or it's Web Server) or a full URL address.

The *Widget Title* field is the title that is placed in the heading of the Widget. Click the *Edit Widget Title* icon 🖉 to change the title of the Widget. The *Edit Widget Title* dialog is displayed, e.g.
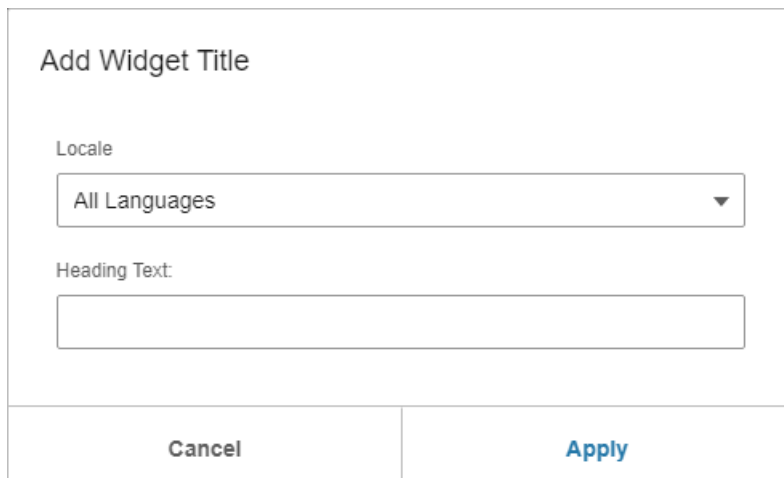
Edit Widget Title

+ ✎ 🗑

Cancel   **Apply**

You can either create a single Widget Title for all languages or have language specific Widget Titles. Initially, there will be no Widget Titles defined, and the list box in the dialog will be empty.

To add a new Widget Title, click the *Add Widget Title* icon ╋. The *Add Widget Title* dialog will open, e.g.

Add Widget Title

Locale

All Languages   ▼

Heading Text:
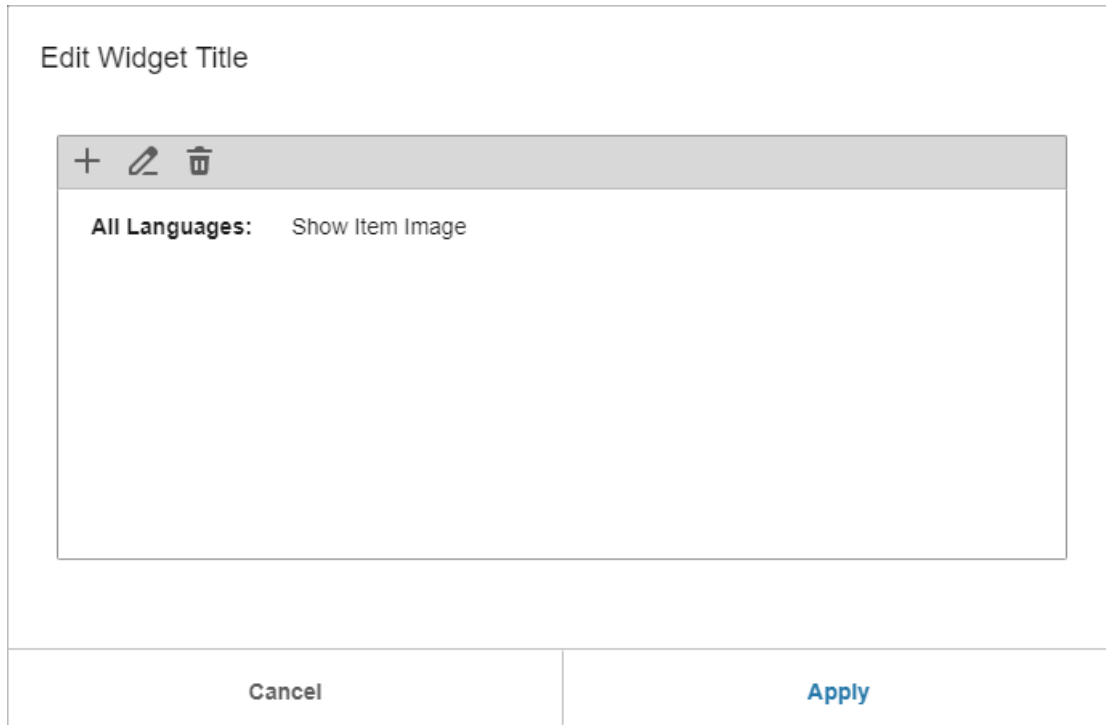
Cancel   **Apply**

Use the *Locale* field to select the language for this Widget Title or use the **All Languages** option to apply the Widget Title regardless of what language the user has signed in to Infor System I Workspace AnyWhere as.

Use the *Heading Text* field to assign the text of the new Widget Title.
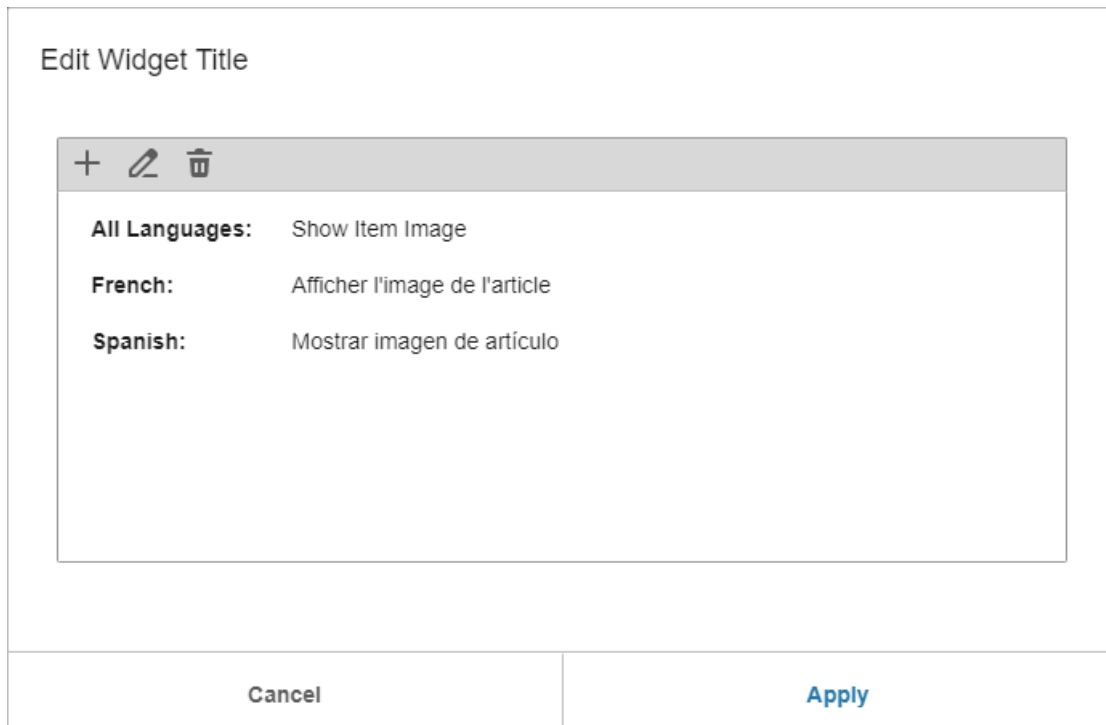
Click *Cancel* to close the *Add Widget Title* dialog and abort any changes.

Click *Apply* to close the *Add Widget Title* dialog and update the *Edit Widget Title* dialog list with the new Window Title entry, e.g.

Edit Widget Title

+ ✎ 🗑

All Languages: Show Item Image

Cancel   **Apply**
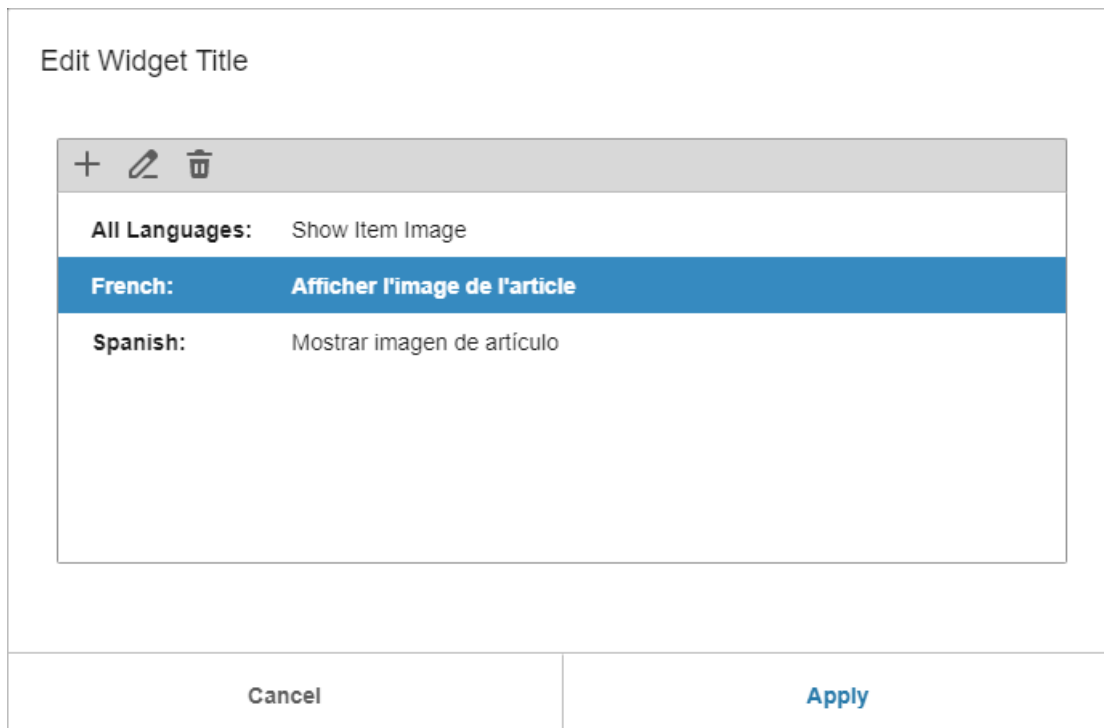
You can add multiple Widget Titles for different languages, e.g.

Edit Widget Title

+ ✎ 🗑

All Languages: Show Item Image

French: Afficher l'image de l'article

Spanish: Mostrar imagen de artículo

Cancel   **Apply**

Caution: Once a Widget Title has been created for a language, you will not be able to define another Widget Title for that language.

To change an existing Widget Title, first click on the Widget Title in the list to select it, which will highlight the selected row, e.g.
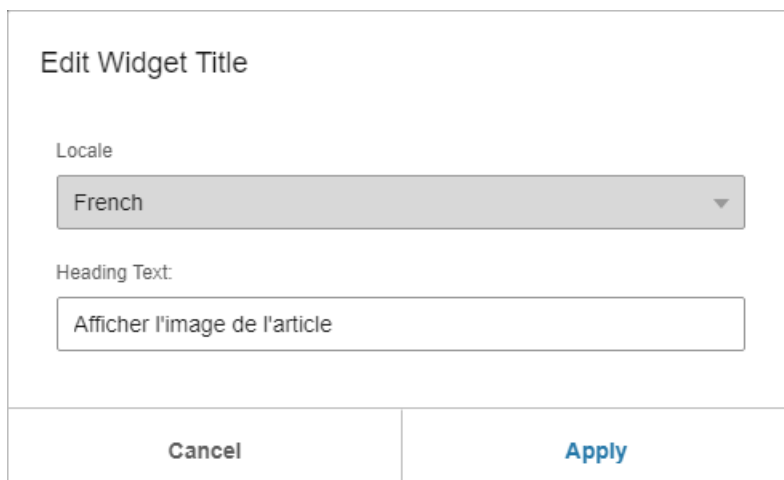
Edit Widget Title

+ ✎ 🗑

All Languages:	Show Item Image
French:	**Afficher l'image de l'article**
Spanish:	Mostrar imagen de artículo

Cancel   Apply

Once selected, to change the Widget Title, click the *Edit Widget Title* icon ✎ . The *Edit Widget Title* dialog will open, e.g.

Edit Widget Title

Locale

French ▼

Heading Text:

Afficher l'image de l'article

Cancel   Apply

When editing an existing Widget Title, the *Locale* field is displayed, but cannot be changed.

The behaviour of the *Heading Text* field and the *Cancel* and *Apply* actions is the same as in the *Add Widget Title* dialog described above.
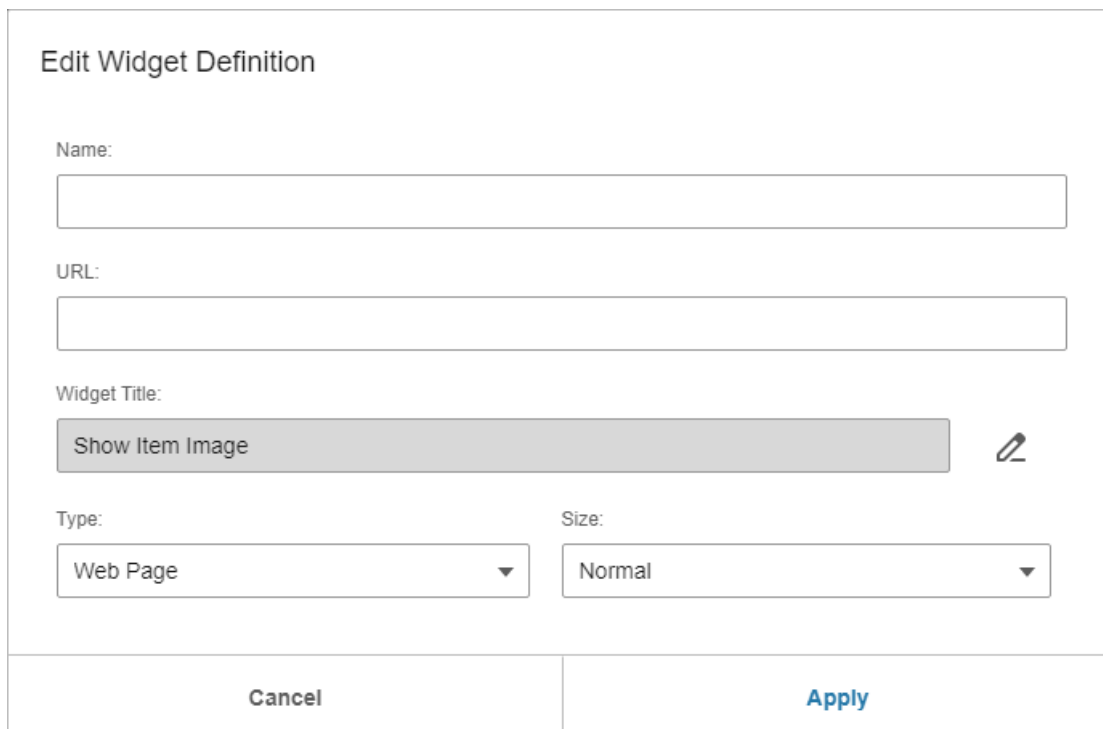
To delete a Widget Title, select the desired item within the list of Widget Titles in the *Edit Widget Title* dialog, so that it is highlighted, and then select the *Delete Widget Title* icon 🗑 . The highlighted row will be removed from the list.

If either of the *Edit Widget Title* or *Delete Widget Title* icons are clicked when no row in the list of Widget Titles in the *Edit Widget Title* dialog is highlighted, then no change will be performed.

Select *Cancel* to close the *Edit Widget Title* dialog without making any changes.

Select *Apply* to close the *Edit Widget Title* dialog and confirm the tooltip changes.

When you select *Apply*, the *Widget Title* field within the *Edit Widget Definition* dialog will be updated with the appropriate Widget Title text dependant on the language you logged into Infor System I Workspace AnyWhere with, e.g.

The *Type* field is used to select the content type of the Widget. There are two options: Web Page (for any standard HTML-based web page) and Adobe Flash Object.

The *Size* field is used to define the size of the Widget window. There are three options; *Normal* (a 456x370 pixel window), *Expanded* (a 931x370 pixel window) and *Full Size* (sized to fill the right-side of the 5250 AnyWhere Emulator).

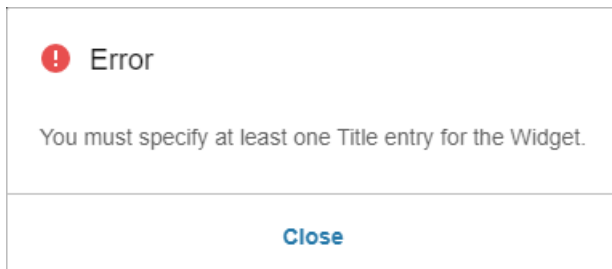Select *Apply* to confirm the changes or *Cancel* to discard the changes.

If you select *Apply* and the *Name* field is blank, you will see the following message…
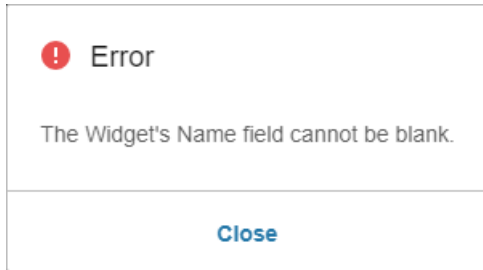
If you select *Apply* and the *URL* field is blank, you will see the following message…
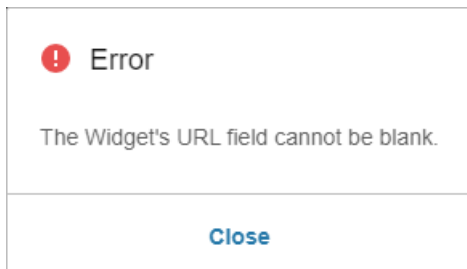
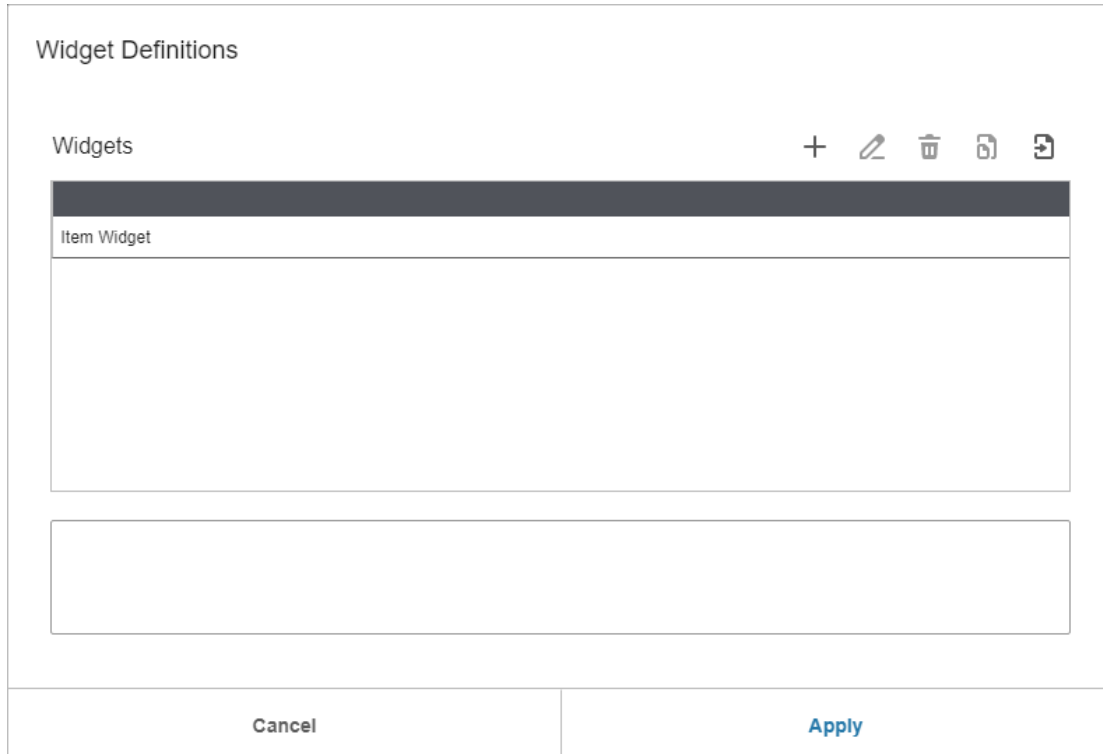If you select *Apply* and no *Widget Title* text has been defined, you will see the following message…
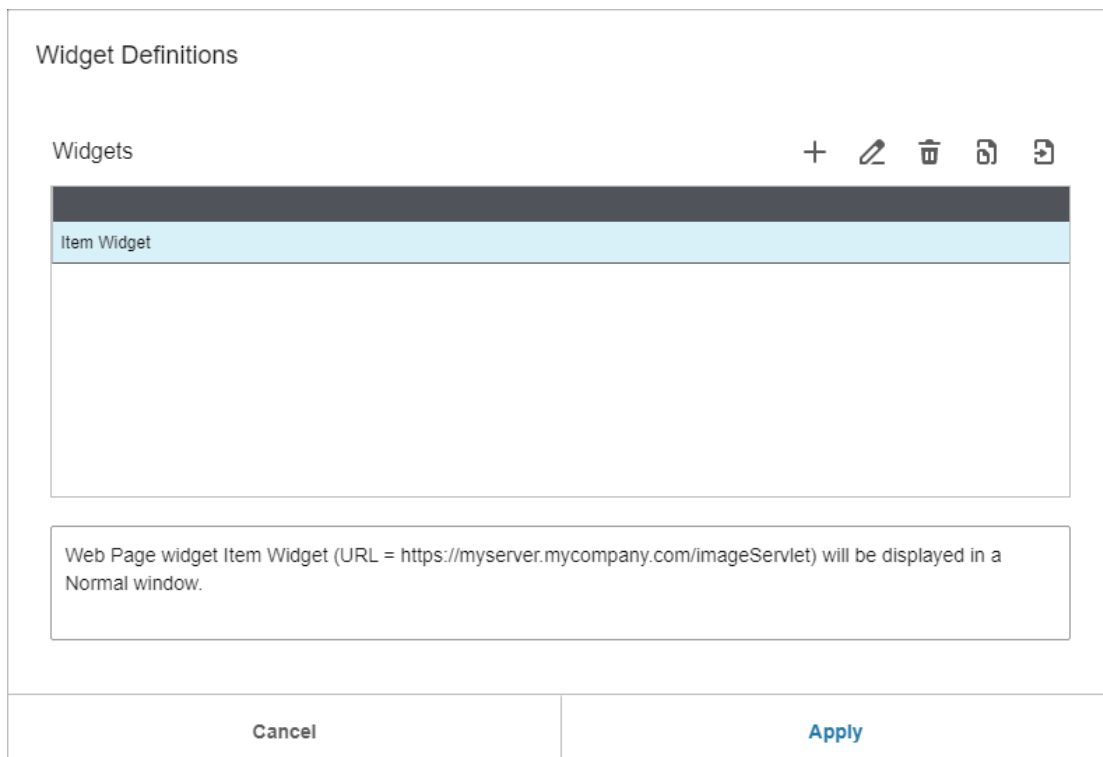

Click *Close* to dismiss any of these messages.

If *Apply* was selected in the *Edit Widget Definition* dialog, the *Widget Definitions* dialog will be updated with the new widget definition, e.g.

If you select an item within the *Widgets* grid, a more verbose description of the Widget and its properties is displayed below the grid, e.g.
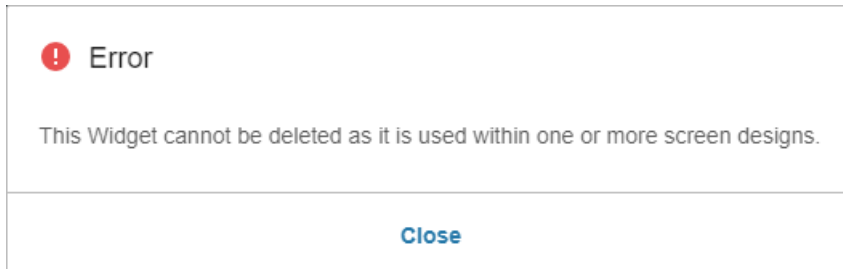
You may create as many Widget definitions as you like.

To edit an existing Widget definition, select the Widget within the *Widgets* grid and then select the *Edit Widget Definition* icon ✎ from the toolbar above the *Widgets* grid. The *Edit Widget Definition* dialog will be displayed.
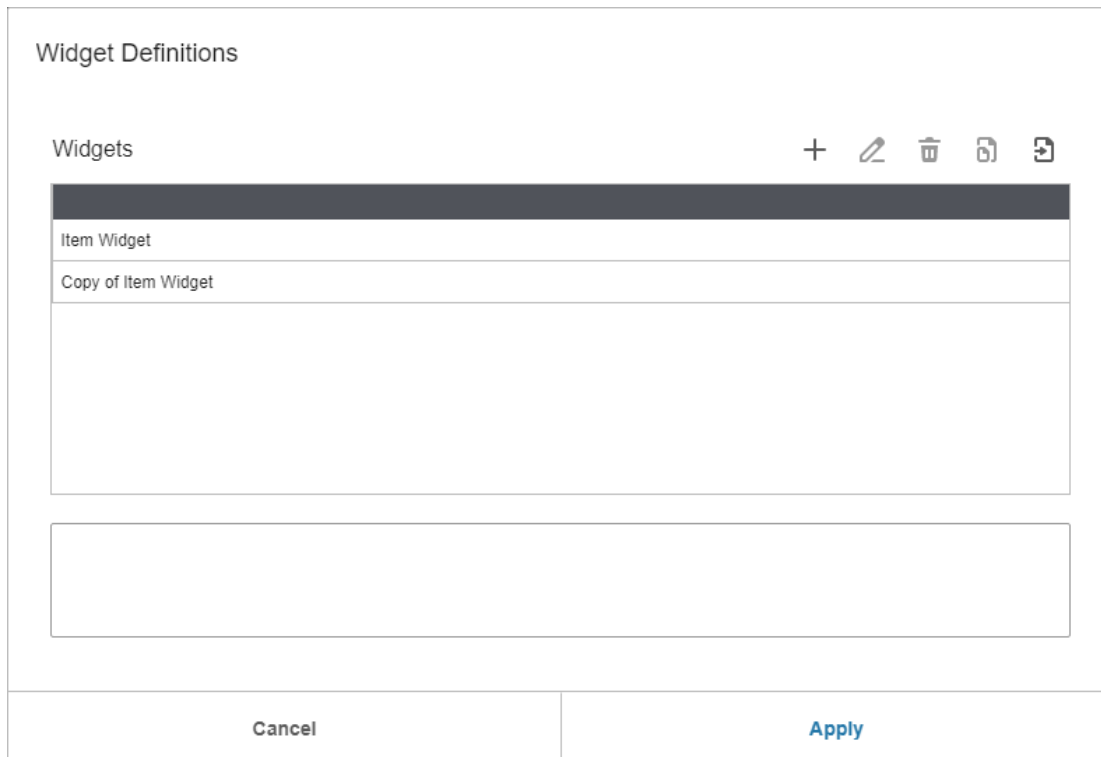
To remove an existing Widget definition, select the Widget within the *Widgets* grid and then select the *Remove Widget Definition* icon 🗑 from the toolbar above the *Widgets* grid. The Widget will be removed from the grid.

If you attempt to remove a Widget definition that is in use in any screen design, you will see an error message, e.g.
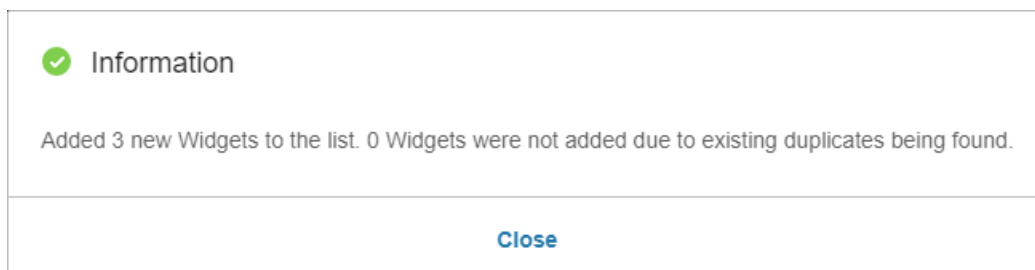

Select *Close* to cancel the message. You will not be able to remove the Widget definition until it is no longer used within any screen design.

To duplicate an existing Widget definition, select the Widget within the *Widgets* grid and then select the *Duplicate Widget Definition* icon 📄 from the toolbar above the *Widgets* grid. A copy of the Widget definition will be created, e.g.

Widget Definitions

Widgets   +   ✐   🗑   🗒   ⇥

| Item Widget |
| Copy of Item Widget |

| |

| |

| Cancel | Apply |

The duplicate will have all the same Widget properties as the original, but with a different name.

You can import existing Widget definitions from Infor System I Workspace AnyWhere by selecting the *Import Widgets From System i Workspace* icon ⇥ from the toolbar above the *Widgets* grid. A message detailing the imported Widgets will be displayed, e.g.

✅ Information

Added 3 new Widgets to the list. 0 Widgets were not added due to existing duplicates being found.
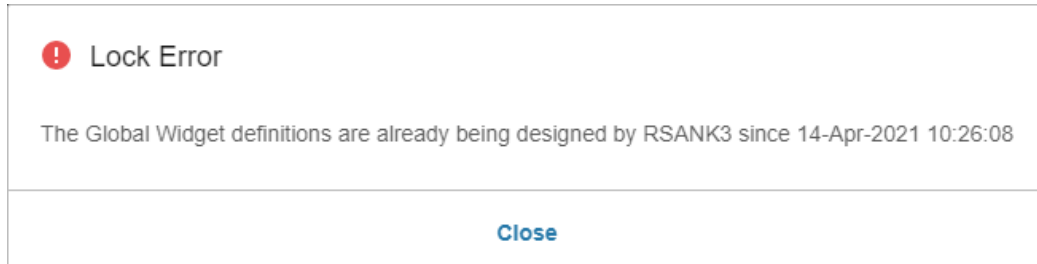
Close

The Widgets grid will be updated with the imported definitions. These Widget definitions can be edited. Any changes will not affect the original definitions within Infor System I Workspace AnyWhere.

Select *Apply* to accept the Widget definitions in the list or select *Cancel* to discard any changes.

If Designer Versioning is enabled for the current Infor System I Workspace AnyWhere Profile, you may see an additional dialog if you select *Apply* to accept the new Widgets. For more details, see the Adding Version Comments section.

Because Widgets are defined across multiple screens, you can edit them, within Designer, from any IBM i application screen. The Widget definitions are held separately from the individual screen designs.

In the same way as two people cannot design a screen at the same time, Infor System I Workspace AnyWhere will prevent two people changing Widget definitions at the same time. If you select the *Global – Define Global Widgets* menu option, and another user is designing them, you will see the following message…

> ❗ Lock Error
>
> The Global Widget definitions are already being designed by RSANK3 since 14-Apr-2021 10:26:08
>
> ---
> **Close**

Select *Close* to close the message.

If another user has updated the Widget definitions since you logged into Infor System I Workspace AnyWhere, the latest copy of the Widgets will be downloaded to your PC before you begin changing them.

Global Field Formats

Field Formats allow you to change the content of Label Fields and read-only Edit Fields. Their primary application is for changing numeric and date values to a user's locale specific format or adding in thousand separators where they are not applied by the IBM i application. Within this interface, you can define one or more Field Formats which can then be applied on a per-field, per-screen, or global basis.

To create a new Global Field Format definition, select the *Global – Define Global Field Formats* menu item. The *Field Format Definitions* dialog is displayed, e.g.
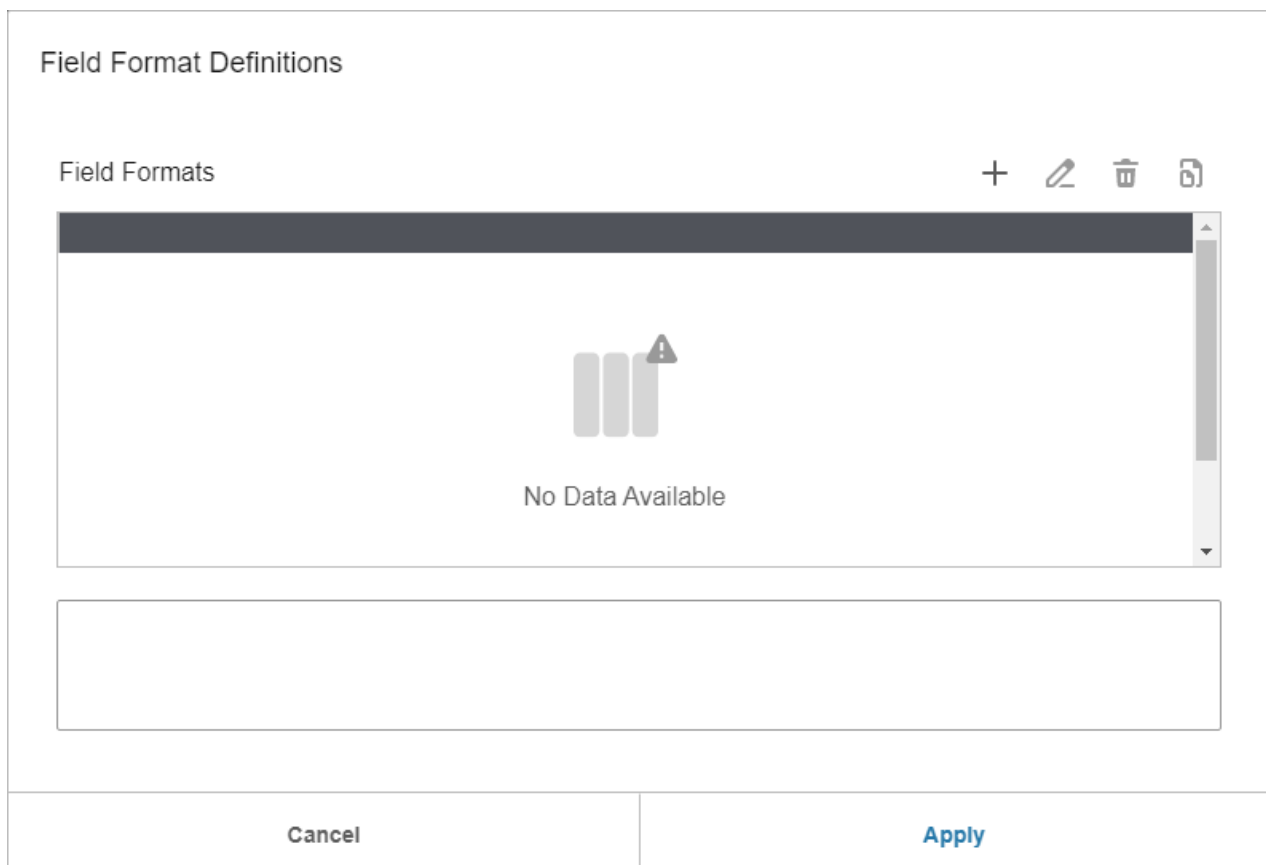
Any existing Global Field Format definitions will be listed within the *Field Formats* grid.

To create a new Field Format definition, select the *Add Field Format Definition* icon ✛ from the toolbar above the *Field Formats* grid. The *Edit Field Format Definition* dialog is displayed, e.g.

The *Name* field is the unique identifier for this Field Format. It is only used within Designer for reference and can be changed without affecting any existing assignments of this Widget within your IBM i application screens.

The *Field Format* field is where you define the template for the output format you wish to create. The formatting is provided by the Infor System I Workspace AnyWhere Web Server's Java run-time, using the standard Java Formatter class. The syntax to use, and all the permitted values, are documented fully here: https://docs.oracle.com/javase/7/docs/api/java/util/Formatter.html#syntax

For example, a Field Format of `%,.2f` would display a numeric value with an optional thousand separator and two decimal places (e.g. a Label field with the value 1234.555 would be displayed as 1,234.56).

Select *Apply* to confirm the changes or *Cancel* to discard the changes.

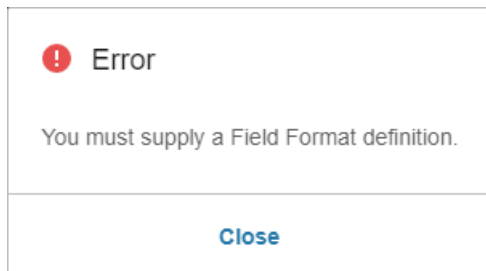If you select *Apply* and the *Name* field is blank, you will see the following message…

Click *Close* to dismiss the message.

If you select *Apply* and the *Field Format* field is blank, you will see the following message…

Click *Close* to dismiss the message.

If *Apply* was selected in the *Edit Field Format Definition* dialog, the *Field Format Definitions* dialog will be updated with the new definition, e.g.
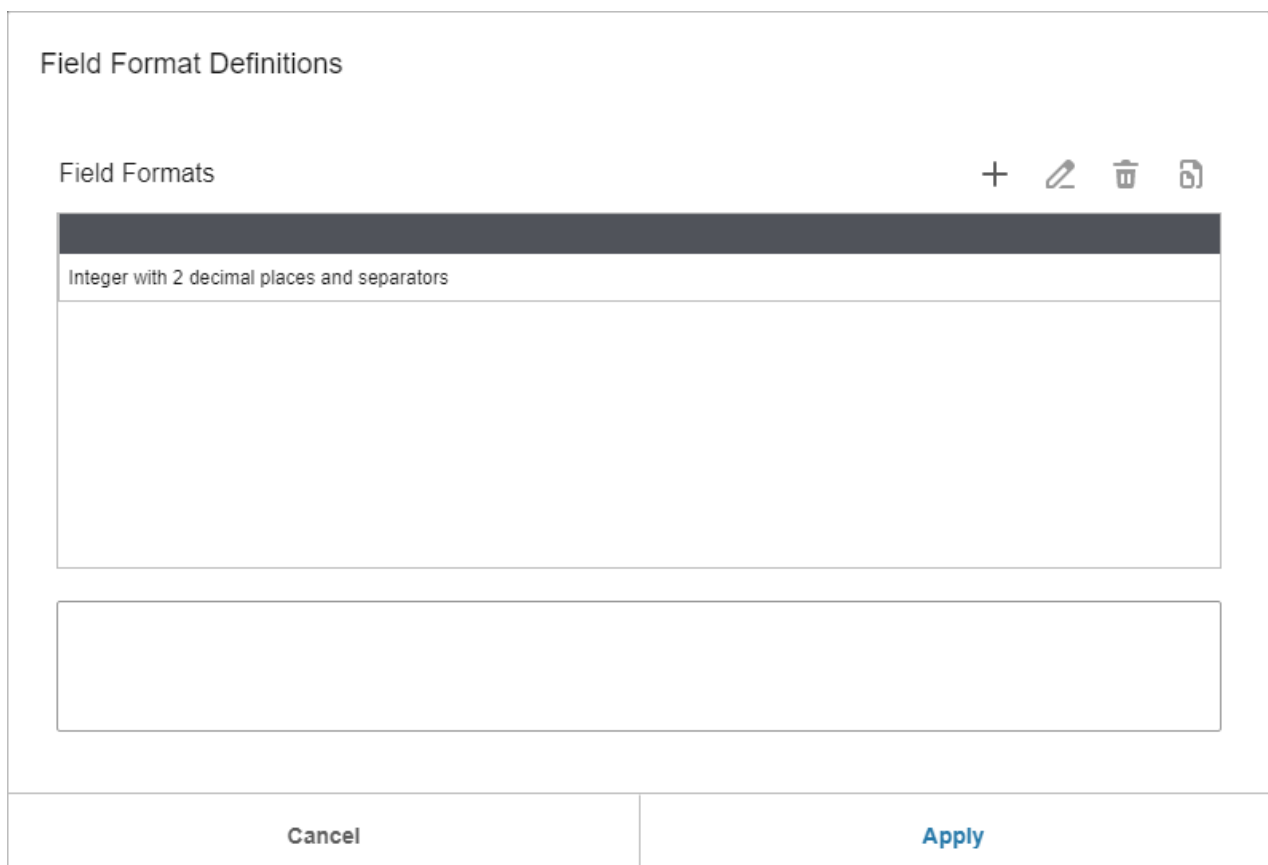
If you select an item within the *Field Formats* grid, a more verbose description of the Field Format and its properties is displayed below the grid, e.g.

Field Format Definitions

Field Formats   + ✎ 🗑 ⎙

Integer with 2 decimal places and separators

Field format Integer with 2 decimal places and separators (%,.2f).

Cancel	Apply

You may create as many Field Format definitions as you like.

To edit an existing Field Format definition, select the Field Format within the *Field Formats* grid and then select the *Edit Field Format Definition* icon ✎ from the toolbar above the *Field Formats* grid. The *Edit Field Format Definition* dialog will be displayed.

To remove an existing Field Format definition, select the Field Format within the *Field Formats* grid and then select the *Remove Field Format Definition* icon 🗑 from the toolbar above the *Field Formats* grid. The Field Format will be removed from the grid.

If you attempt to remove a Field Format definition that is in use in any screen design, you will see an error message, e.g.

🛑 Error

This Field Format cannot be deleted as it is used within one or more screen designs.

Close

Select *Close* to cancel the message. You will not be able to remove the Field Format definition until it is no longer used within any screen design.

To duplicate an existing Field Format definition, select the Field Format within the *Field Formats* grid and then select the *Duplicate Field Format Definition* icon [icon] from the toolbar above the *Field Formats* grid. A copy of the Field Format definition will be created, e.g.

If Designer Versioning is enabled for the current Infor System I Workspace AnyWhere Profile, you may see an additional dialog if you select *Apply* to accept the new Field Formats. For more details, see the Adding Version Comments section.

Because Field Formats are defined across multiple screens, you can edit them, within Designer, from any IBM i application screen. The Field Format definitions are held separately from the individual screen designs.

In the same way as two people cannot design a screen at the same time, Infor System I Workspace AnyWhere will prevent two people changing Field Format definitions at the same time. If you select the *Global – Define Global Field Formats* menu option, and another user is designing them, you will see the following message…
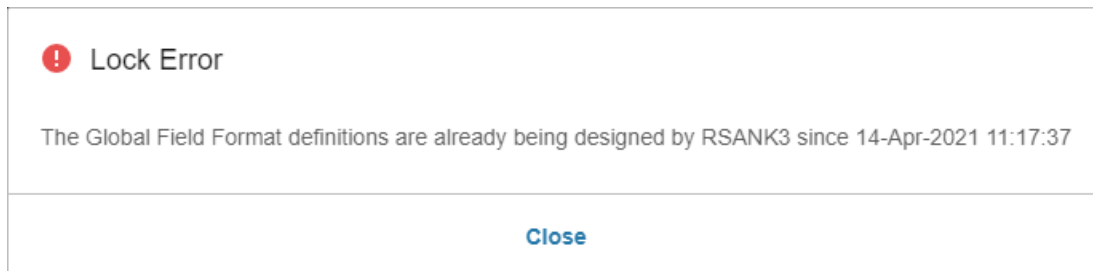
Select *Close* to dismiss the message.

If another user has updated the Field Format definitions since you logged into Infor System I Workspace AnyWhere, the latest copy of the Field Formats will be downloaded to your PC before you begin changing them.

Global Hyperlink Definitions

A Hyperlink is a highlighted piece of text that, when clicked with the left mouse button, will either open a new tab containing a webpage, another IBM i program, or activate JavaScript extension code.

Within this interface, you can define one or more Hyperlink Definitions which can then be applied on a per-field, per-screen, or global basis.

To create a new Global Hyperlink Definition, select the *Global – Define Global Hyperlink Definition* menu item. The *Hyperlink Definitions* dialog is displayed, e.g.

Any existing Global Hyperlink definitions will be listed within the *Hyperlinks* grid.

To create a new Hyperlink Definition, select the *Add Hyperlink Definition* icon ✛ from the toolbar above the *Field Formats* grid. The *Select Hyperlink Type* dialog is displayed, e.g.

Select one of the Hyperlink Types from these options…

Hyperlink Type	Hyperlink Action
Task Hyperlink	Clicking the Hyperlink will open a new tab in Infor System I Workspace AnyWhere and open either an ERP task or an IBM i command
URL Hyperlink	Clicking the Hyperlink will open a new tab in Infor System I Workspace AnyWhere and display the web page accessed via the supplied URL
JavaScript Hyperlink	Clicking the Hyperlink will call the supplied JavaScript method

Choose *Select* to proceed or *Cancel* to discard the new Hyperlink Definition.

Choosing *Select* will display the appropriate properties dialog for the selected Hyperlink Type. The style of the dialog will differ depending on the selected Hyperlink Type. For example, for a Task Hyperlink, the *Task Hyperlink Properties* dialog is displayed…

…but if you selected the URL Hyperlink, the *URL Hyperlink Properties* dialog is displayed…

URL Hyperlink Properties

Name:

URL:

☐ Show URL in Popup Window

Parameters   + 🖵 ✎ 🗑

Parameter Name	Value	Joined

⚠

No Data Available

Cancel	Select

Regardless of the Hyperlink Type, the *Name* field is the unique identifier for this Hyperlink Definition. It is used within Designer for reference and can be changed without affecting any existing assignments of this Hyperlink within your IBM i application screens.

Caution: The *Name* field will be used as the default Infor System I Workspace AnyWhere Module Tab Heading for the new task launched by this Hyperlink.

See the *Add a Task Button* section for more details on defining the ERP Task or IBM i Command and adding parameters to the *Task Hyperlink Properties* dialog.

See the *Add a URL Button* section for more details on defining the URL and adding parameters to the *URL Hyperlink Properties* dialog.

See the *Add a JavaScript Button* section for more details on defining the JavaScript method and adding parameters to the *JavaScript Hyperlink Properties* dialog.

The only difference for Hyperlinks to the custom button-related documentation is that the 🖥 icon changes from the usual *Add Screen Field or Designer Variable* function and is replaced with the *Add Designer Variable or Hyperlink Label* function. Selecting this option will open the *Parameter Properties* dialog appropriate for the Hyperlink Type, but the *Parameter Value* field will only contain Designer Variables you have previously defined, plus the *Hyperlink Label* option, e.g.

Parameter Properties

Parameter ID:

Parameter Value:

Hyperlink Label ▾

☐ Join This Parameter With Previous One

☐ Only use a Sub-section of this Override Value

Start Position:
- | 1 | +

Sub-section Length:
- | 1 | +

Cancel | **Change**

Selecting the *Hyperlink Label* option will result in the Hyperlink Definition using the text of the Hyperlink field as a parameter at runtime. For example, if the Hyperlink Definition was applied to a Label Field whose text was CUSTOMER1, then CUSTOMER1 would be passed as the Parameter Value wherever *Hyperlink Label* option is used. As with other Parameter Values, a sub-section of the Hyperlink label can be passed, and for URL and JavaScript Hyperlink Types, the Hyperlink Label can be joined with other Parameter Values.

Regardless of the Hyperlink Type, if you choose *Select* in the *Hyperlink Properties* dialog and the *Name* field is blank, you will see the following message…

❗ Error

You must enter a name for this Hyperlink Definition.

Close

Select *Close* to dismiss the message.

If *Select* was successfully chosen in the *Hyperlink Properties* dialog, the *Hyperlink Definitions* dialog will be updated with the new definition, e.g.
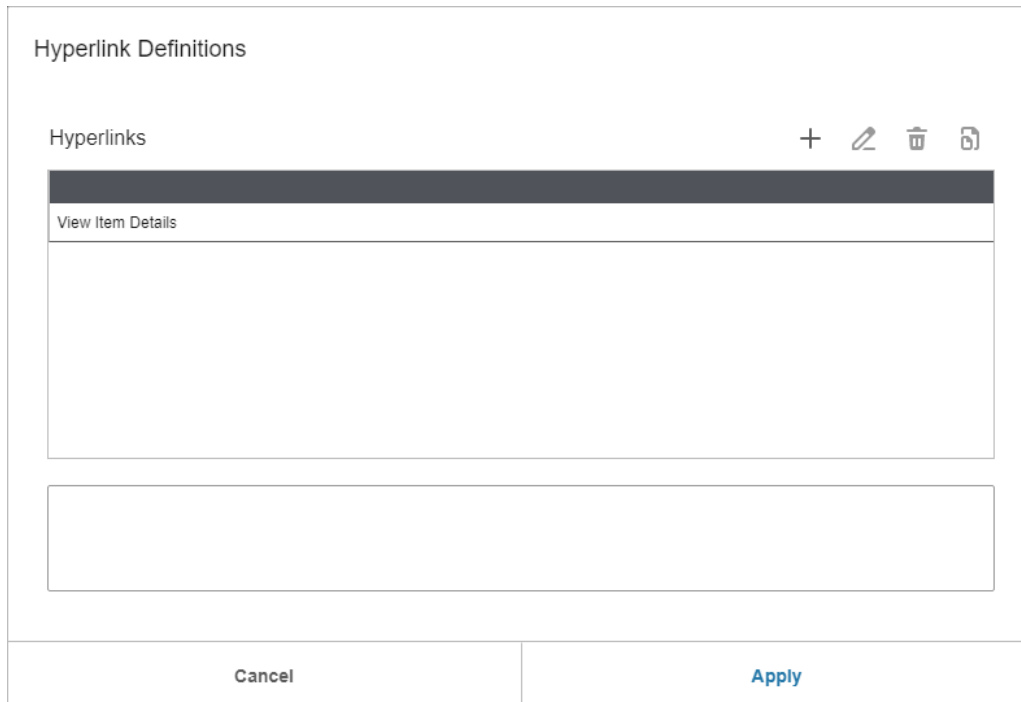
If you select an item within the *Hyperlinks* grid, a more verbose description of the Hyperlink and its type is displayed below the grid, e.g.
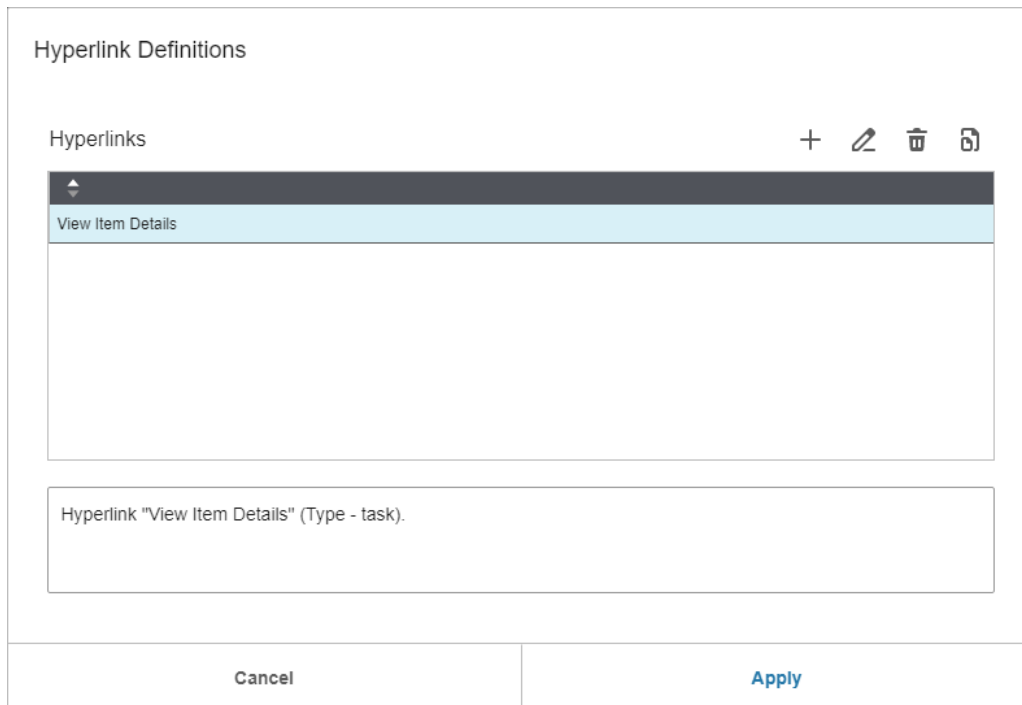
You may create as many Hyperlink Definitions as you like.

To edit an existing Hyperlink Definition, select the Hyperlink Definition within the *Hyperlinks* grid and then select the *Edit Hyperlink Definition* icon ✎ from the toolbar above the *Hyperlinks* grid. The Hyperlink Definition dialog appropriate to the Hyperlink Type will be displayed.

Caution: You cannot change the type of an existing Hyperlink Definition.

To remove an existing Hyperlink Definition, select the Hyperlink Definition within the *Hyperlinks* grid and then select the *Remove Hyperlink Definition* icon 🗑 from the toolbar above the *Hyperlinks* grid. The Hyperlink Definition will be removed from the grid.

If you attempt to remove a Hyperlink Definition that is in use in any screen design, you will see an error message, e.g.
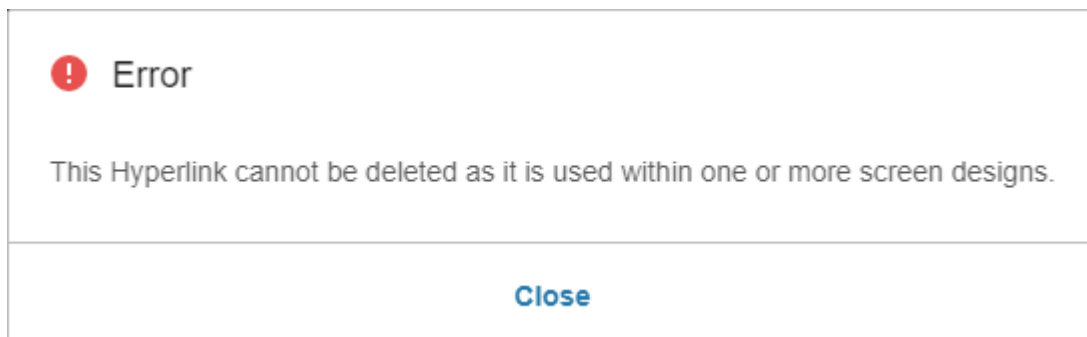
Select *Close* to dismiss the message. You will not be able to remove the Hyperlink Definition until it is no longer used within any screen design.

To duplicate an existing Hyperlink Definition, select the Hyperlink Definition within the *Hyperlinks* grid and then select the *Duplicate Hyperlink Definition* icon 🗗 from the toolbar above the *Hyperlinks* grid. A copy of the Hyperlink Definition will be created, e.g.
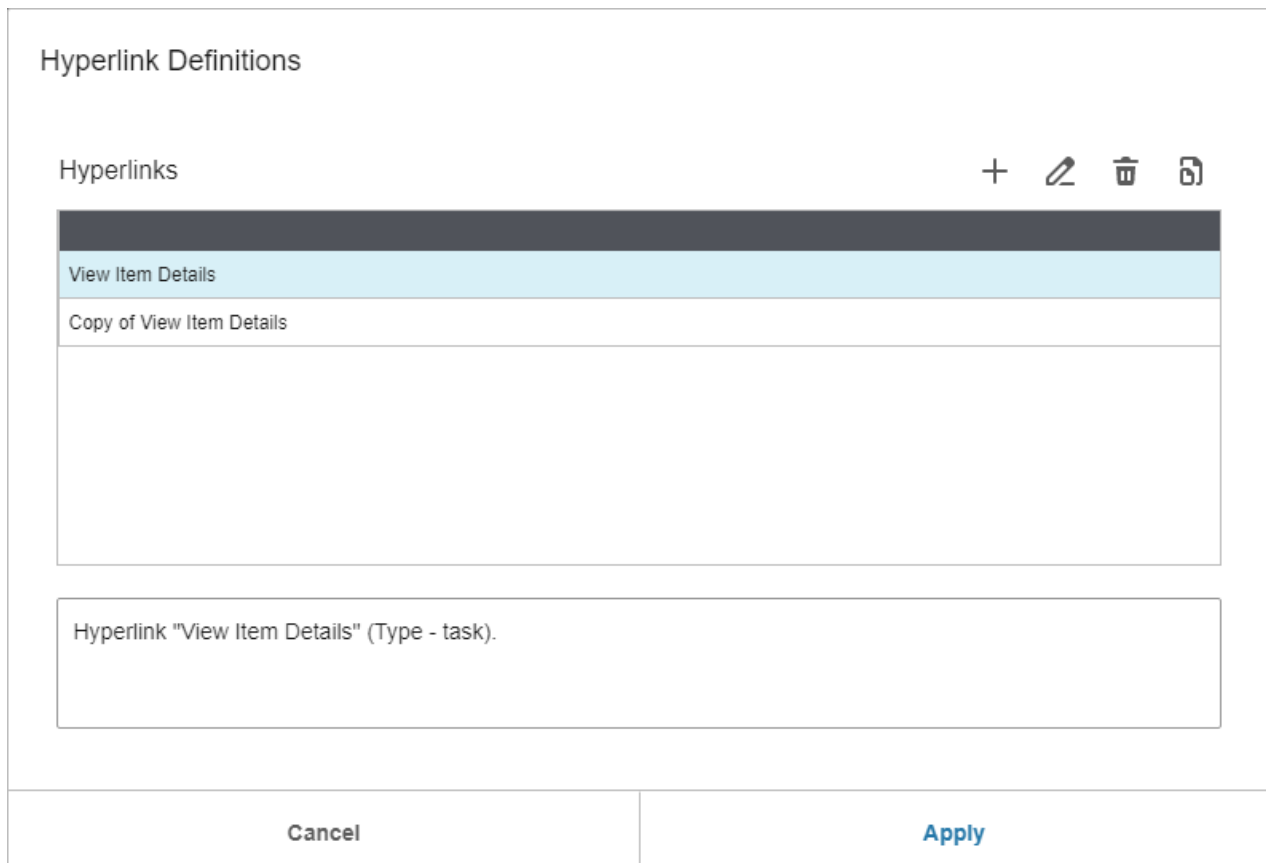
If Designer Versioning is enabled for the current Infor System I Workspace AnyWhere Profile, you may see an additional dialog if you select *Apply* to accept the new and changed Hyperlink Definitions. For more details, see the Adding Version Comments section.

Because Hyperlink Definitions are defined across multiple screens, you can edit them, within Designer, from any IBM i application screen. The Hyperlink Definitions are held separately from the individual screen designs.

In the same way as two people cannot design a screen at the same time, Infor System I Workspace AnyWhere will prevent two people changing Hyperlink Definitions at the same time. If you select the *Global – Define Global Hyperlinks* menu option, and another user is designing them, you will see the following message…
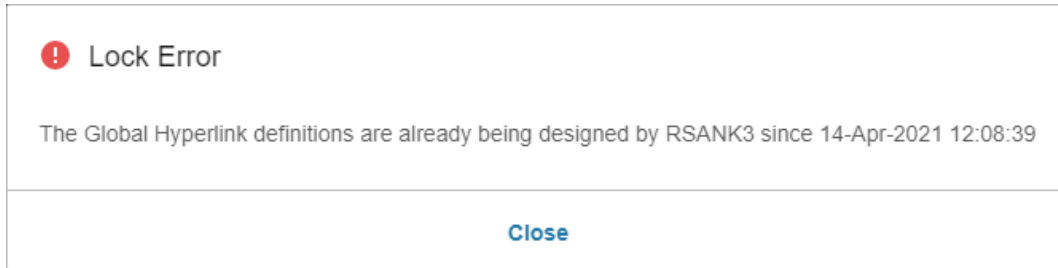
Select *Close* to dismiss the message.

If another user has updated the Hyperlink Definitions since you logged into Infor System I Workspace AnyWhere, the latest copy of the Global Hyperlink Definitions will be downloaded to your PC before you begin changing them.

Designing a Popup Window

When a System i Application displays a Popup Window, to start Designer, select the *Design This Screen* button from the 5250 AnyWhere Emulator's Context Menu, e.g.
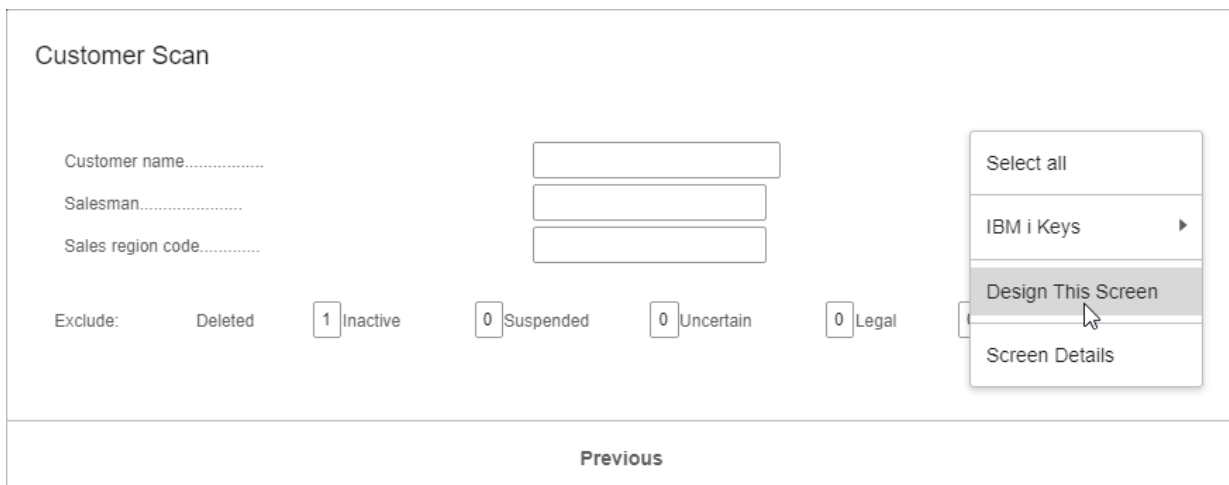
On entering design-time mode, the Popup Window will be shown as it would if you were running a standard 5250 terminal emulation. The border of the Popup Window is shown as a reverse-highlight border (or sometimes shown as a dotted line border), e.g.
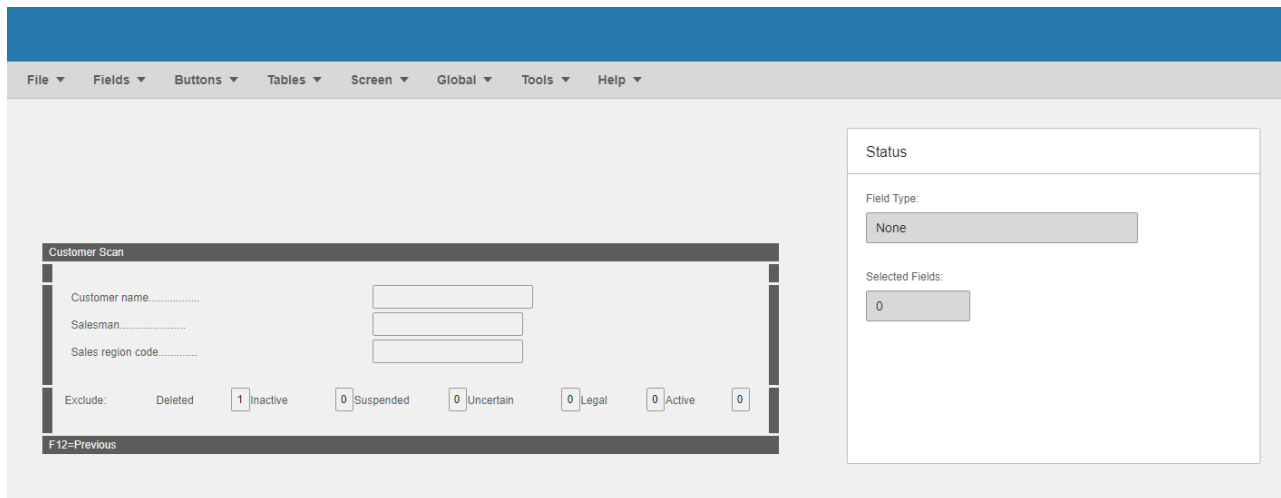
You can design the inner content of the Popup Window as you would for a full application screen with the following exceptions…

- You cannot drag border elements (left, right, top or bottom) to new locations (as this could cause window recognition issues and screen corruption).

- You cannot drag elements from within the Popup Window onto the border elements or outside the Popup Window border.

- You should not extend the text of any Label, or the width of any field, so that it overwrites a border element as this could cause window recognition issues and/or screen corruption.

- You should be cautious when changing the text on the bottom border of a Popup Window, especially if it contains multiple action commands (e.g. F3=Exit F12=Previous). Each action command should be separated by two spaces for it to be recognized as a button within the Popup Window at runtime.

Caution: If you wish to remove an action command from display, we recommend that you use the Global Rules Hide Function Key Buttons action, rather than editing the Popup Window border text.

Caution: When you exit Designer, after editing a Popup Window, the original background content of the Popup Window will be lost. Close the Popup Window using the standard IBM i application actions to restore the screen and then re-open the Popup Window to continue.

Adding Version Comments

Design versioning allows you to add a version number and optional comment to each screen design when it is saved.

By default, versioning is turned off. To enable design versioning, open the *Workspace Configuration* section of the Infor System I Workspace AnyWhere Administration page and select the *Profiles* option. Locate the 5250 AnyWhere Emulator Settings section of the profile, e.g.

Against your Infor System I Workspace AnyWhere profile, change the *Design Versioning* field to **Enabled**. Click *Update* icon to apply the change.

Start Infor System I Workspace AnyWhere and login to the changed profile. Run an IBM i task and enter Designer. Make a change and then select either *File -> Save* or *File -> Exit*. You will now see the *Edit Version Information* dialog box, e.g.

In the *Version Number* field, use the two numeric entry fields to set a version number (*Major* and *Minor* version values). Alternatively, check the *Auto-Increment Version Number* field so that each time you save, the version number will be automatically incremented to the next minor version (e.g. 1.0 becomes 1.1). If a version number was set during a previous save of the screen design, it will be restored, as will the state of the *Auto-Increment Version Number* field.

In the *Comment* field, enter text describing the changes that you have made to the screen design. This can be left blank. If comments were set during a previous save of the screen design, they will be restored.

Select *Save* to apply the comment/version and continue saving the design change. Select *Cancel* to abort.

> **Caution:** The version and comment are NOT archived. Adding a new version/comment will replace any existing one.

You can see an existing version/comment via the *Help -> About* dialog, e.g.
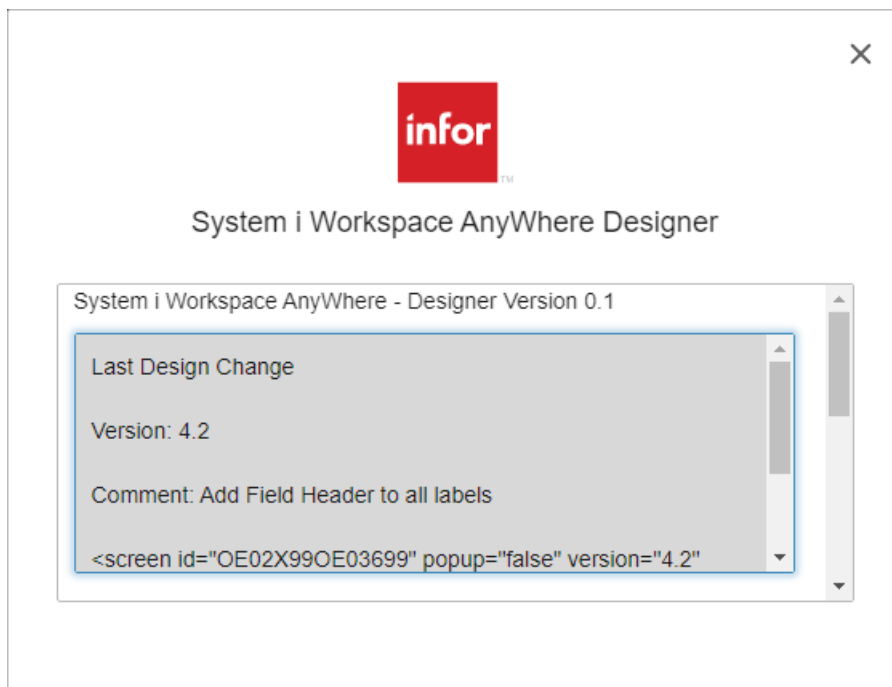
Screen Design Templates

Infor provides a set of templates, which we refer to as Screen Design Templates (SDT), for specific Infor ERP System i releases. Within the SDT, Infor has added design elements to standard System i application screens to provide an enhanced out-the-box user interface.

To enable the SDT, open the *Workspace Configuration* section of the *System i Administration* page, and select the *Profiles* option. For each Infor System I Workspace AnyWhere Profile you wish to apply SDT templates for, locate the *Infor Application* setting and select the appropriate Infor IBM i application from the list, e.g.

Infor Application	Infor System21 3.1 ▼

Select *Update* to apply the change.

The next time a user signs in to this Infor System I Workspace AnyWhere Profile, the SDT templates will be downloaded to their client PC and applied where appropriate.

If you have added your own design, using Designer, for a particular screen that is included in the SDT, then your design will be used and the SDT design will be ignored.

If you want to create a new design, for a particular screen that is included in the SDT, then when you enter Designer, the changes within the SDT are copied to your new design so that you do not have to start from scratch. You can then add or remove design changes to suit your needs.

A set of Global Rules may be included within the SDT. If you have added your own Global Rules, using Designer, before enabling the SDT, then your Global Rules will be used and the SD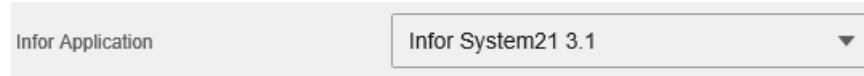T Global Rules will be ignored. If you have no existing Global Rules, and you edit them within Designer, you will inherit the Global Rules from the SDT, to which you can then make changes.

A set of Designer Variables may be included within the SDT. If you have added your own Designer Variables, using Designer, before enabling the SDT, then your Designer Variables will be used and the SDT Designer Variables will be ignored. If you have no existing Designer Variables, and you edit them within Designer, you will inherit the Designer Variables from the SDT, to which you can then make changes.

Importing an Existing Screen Design

The *Import Existing Screen Design* option allows you to reuse design data from an existing screen and apply it onto the current screen. This can be useful when you have created a new Infor IBM i Application Screen based on an existing Infor IBM i program/screen, but with a different Magic Number. By importing the existing design, you can automatically apply common changes rather than having to apply them all again manually.

> **Caution:** This function is primarily designed for producing new screen designs, but it may also be used to reset an existing bespoke screen design to that of another screen or to one provided by Infor as a Screen Design Template. Importing an existing screen design will delete all bespoke design changes for the current screen.

Selecting the *Import Existing Screen Design* menu option from the *File* menu will display a message if the current screen you are designing is bespoke, or if the design is based on one from the Infor Application Screen Design Templates and has one or more unsaved design changes…

Select *Cancel* to abort the import process (your current screen design will remain unchanged).

Select *Import* to proceed.

The *Import Existing Design* dialog will be displayed…

The *Existing Screen Designs* grid contains a complete list of all bespoke and Screen Design Template screen designs, listed by their Magic Number in alphanumeric order. Magic Numbers for the bespoke screens within your current Infor System I Workspace AnyWhere Profile are displayed in bold text and followed by an Asterix. Magic Numbers for the Screen Design Template designs for your current Infor Application (see previous section for more details) are displayed in plain text.

> **Caution:** If you have not selected an Infor Application for the current Infor System I Workspace AnyWhere Profile, only the bespoke design changes will be listed.

> **Caution:** If you have selected an Infor Application for the current Infor System I Workspace AnyWhere Profile, and it contains a large number of screen designs, the display and general performance of this dialog may be slow.

Click on a row within the grid to select it (which will apply a highlight to the grid row) or click an existing row, or a different row, to remove or move the selection highlight.

Use the drop-down icon menu and text field above the grid column to filter the contents of the grid to show only rows containing Magic Numbers that match the filter. Pause a few seconds or press the Enter key to apply the filter. To restore all rows of Magic Numbers, clear the filter text field and pause a few seconds or press the Enter key.

The *Ignore incoming design elements that have no matching screen field* checkbox controls how the import of the existing screen data will be processed. If this field is checked, then any changes to Edit, Label or Button elements in the selected existing design will be checked against the actual fields in the current screen, and any changes that do not have a matching field in the current screen will be ignored. Any other design elements, such as tables, group boxes, screen options etc. will be copied without checks. If this field is unchecked, then no field checking will be performed and all elements from the selected existing design will be brought into the design for the current screen.

> **Caution:** Unchecking this field may result in additional design data being added to the current screen design that will never be applied. This should not adversely affect the display or performance of either Infor System I Workspace AnyWhere Emulator, but it should be done under caution.

Select *Cancel* to abort the import process (your current screen design will remain unchanged).

Select *Import* to proceed with the import of the existing screen design into the current screen.

If you select *Import* without selecting a row within the grid, the following error message will be displayed…
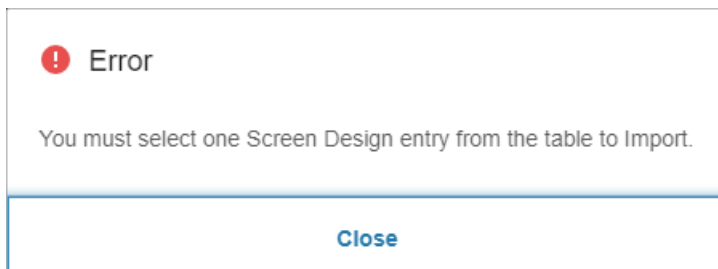
Click *Close* to dismiss the error message.

Once the import of the existing design data has completed, the current screen will be redrawn to show the new design changes.

> **Caution:** At this point, the current screen design has not been saved to the Infor System I Workspace AnyWhere server so you can either continue making design changes to the current screen, or, if there is any problem with the imported layout, use the *File -> Exit* or *File -> Reset* options to discard/remove the imported changes.

> **Caution:** After importing an existing screen design, Infor recommend that you review the non-visible design changes, such as Published Data, Screen Rules, Screen Validation, Button overrides etc. via the respective Designer menu options, to make sure that any field references used are still valid for the current screen.

Chapter 5   Step-by-step example designs

Overview

These example design tutorials provide a pictorial step-by-step introduction to the features of Designer. They are not exhaustive but should give you enough experience with the concepts and function of Designer to be able to use any of the features documented in the previous reference sections.

They are targeted at the complete novice to Designer; but at someone who is also competent with using Infor Web Interfaces and IBM i applications.

This tutorial assumes that Screen Design Templates are not applied to the current Infor System I Workspace AnyWhere Profile.

Caution: The examples below are for training purpose only and should not be applied to a live Infor System I Workspace AnyWhere profile without fully understanding their business impact.

The Ledger Posting Screen

For this first example, we will be using the **Direct Posting** application (11/APP) as this is a program that many Infor ERP System21 3.1 customers use frequently.

≡	System i Home	Direct posting

✎   Actions ▾   🧰 ▾   ⚙   ?

PL103   Z1 - UK Demo Company   USER   RSANK3   15/04/21
                                                                                     07:19:09

Ledger Posting

Session number . . . . :   NEW SESSION

Document type . . . . .   [IN]

Posting period . . . . .   [2012]

Supplier selection . . .   [1]
Confirm items . . . . .   [ ]
Inter-company . . . . .   [ ]
Cross period . . . . . .   [0]

[Exit]   [Previous]
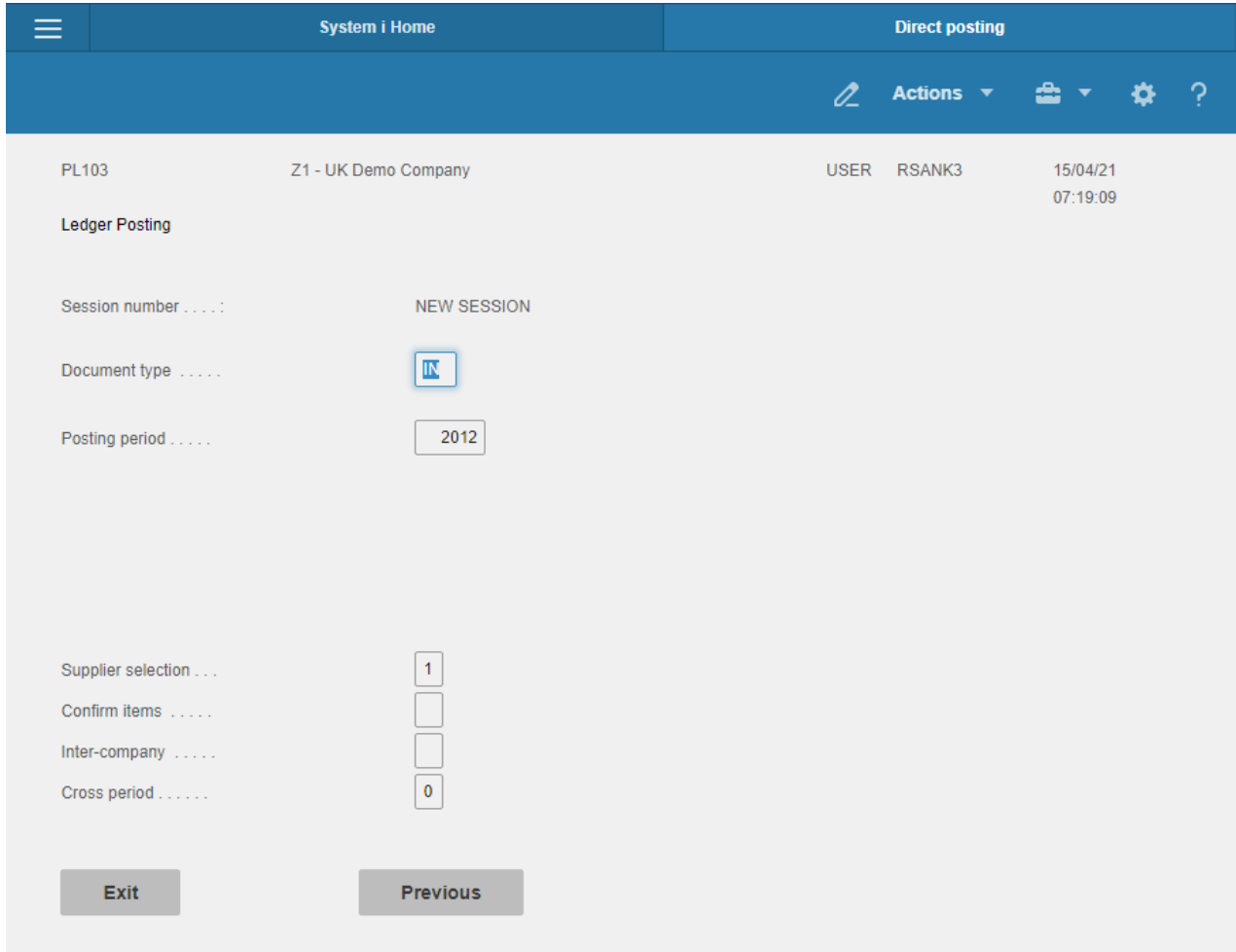
On this first screen, select the *Design This Screen* button to enter design mode.

Move the mouse cursor over the *Ledger Posting* Label and press the right-mouse button to access the context menu. Select *Use As Part Of Window Title*. The *Edit Fields Used For Window Title* dialog will open.

Edit Fields Used For Window Title

| + | ✏ | 🗑 | ↑ | ↓ |

Field (2,1): Ledger Posting
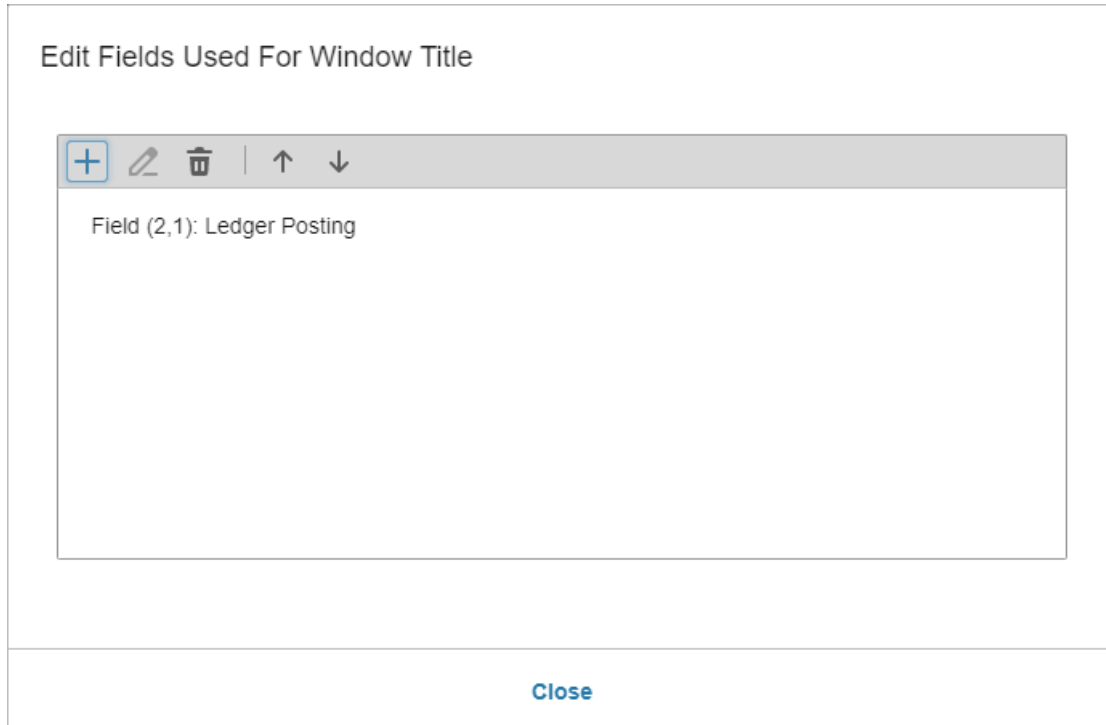
Close

Click *Close*. Page Heading is updated.
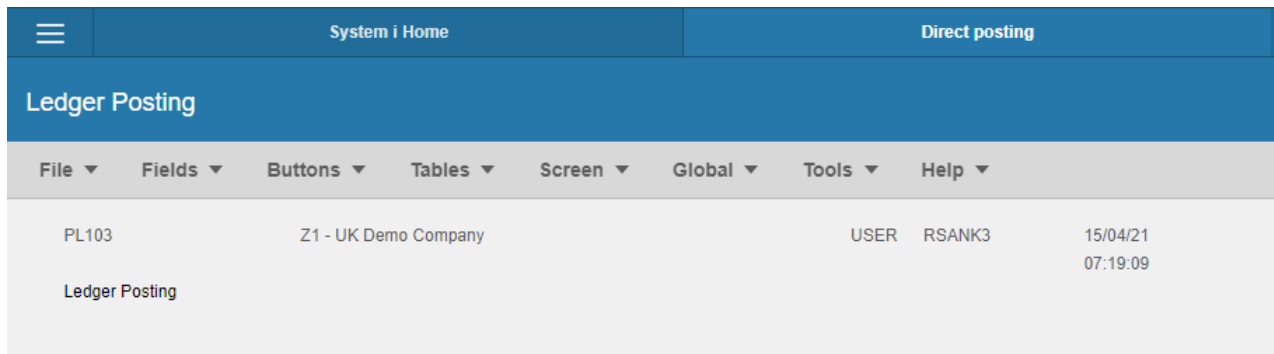
| ☰ | System i Home | Direct posting |

Ledger Posting

File ▼   Fields ▼   Buttons ▼   Tables ▼   Screen ▼   Global ▼   Tools ▼   Help ▼

PL103   Z1 - UK Demo Company   USER   RSANK3   15/04/21
                                                                                 07:19:09

Ledger Posting

Move the mouse cursor over the *Ledger Posting* Label and press the right-mouse button to access the context menu. Select *Hide Field*. Label is removed.
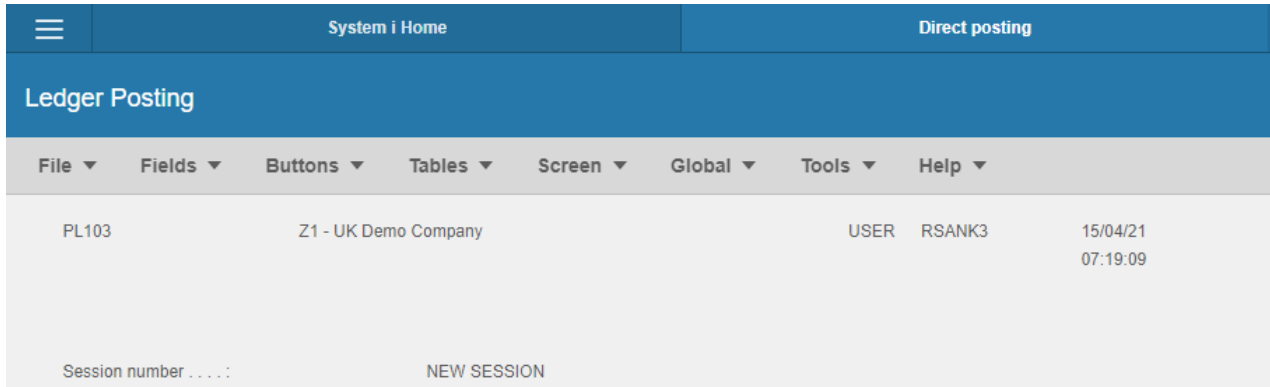
Select the *Screen – Override Whitespace Setting*.
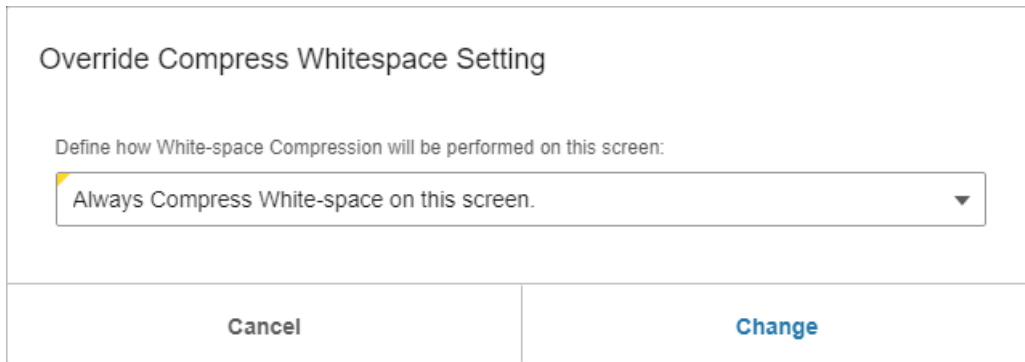
Select the *Always Compress White-space on this screen* from the drop-down list and select *Change*.

Select the *Screen – Override Compress Buttons Setting*.
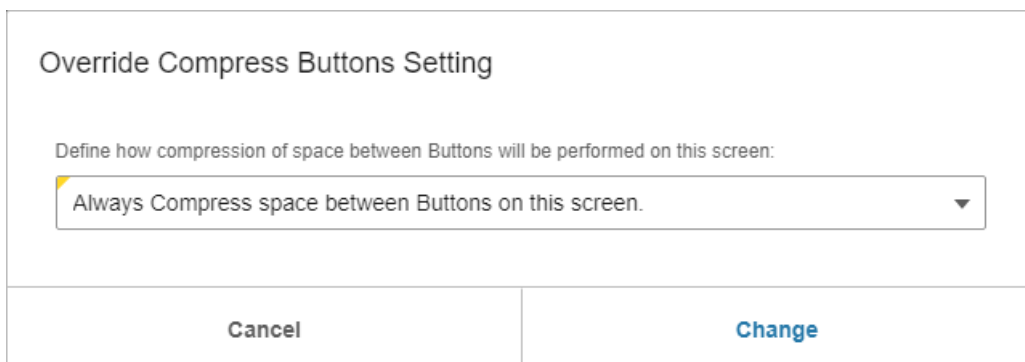
Select the *Always Compress space between Buttons on this screen* from the drop-down list and select *Change*.

Select *Screen – Override Row Clipping*.

Override Row Clipping

Use Default

Override the user's row clipping preferences:

Clip top lines:

- 2 +

Clip bottom lines:

- 0 +

Cancel   Change

Uncheck the *Use Default* option and change the *Clip top lines* field to **2**. Select *Change*.

Select all the Label fields (e.g. Session number, Document type, Quantity, etc.). You can select multiple fields by holding down the shift key and clicking on each label.

Select *Fields – Edit Attributes*.

Edit Field Attributes

Select the text colour to use for this field:

Green ▼

☐ Reverse Image   ☐ Underline

Set the field category:

Field Header ▼

Cancel   Reset   Change

Change the *Set the field category* field to **Field Header** and select *Change*.

Select *File – Save* and then *File – Exit*.

Now, at run-time, users will see the *Ledger Posting* screen like so…

In the *Document Type* field, type **IN**, press **Enter**.

The Invoice Posting Screen (One)

☰	**System i Home**	**Direct posting**

✎ **Actions** ▾   🧰 ▾   ⚙   ?

PL103   Z1 - UK Demo Company   USER   RSANK3   15/04/21
                                                                                       10:00:36
Invoice Posting   A/P Session   2391
                                                                      G/L Session   3071

Supplier . . . . . . ?   [   ]

Text . . . .   [ ]

Supplier search	**End session**	**Review batch controls**
Review session	**Cancel session**	

Select the *Design This Screen* button to enter design mode

Rather than repeat adding the Compress Buttons/Whitespace and Window Title design options, let us add a new Global Rule to do this automatically. Select *Global – Define Global Rules*. In the *Define Rules* dialog, select the *Add Rule* icon. In the *Edit Rule* dialog, select the *Add Test* icon above the *Tests* grid.

Edit Test

Field

Application ▼

Condition

= ▼

Value

PL ✎

Cancel   Apply

Select the *Field* type of **Application**, *Condition* **=** and *Value* of **PL**. This will mean that any changes are only applied to applications that are part of the PL group. Select *Apply.*

Add another Test.

Edit Test

Field

Taskcode ▼

Condition

= ▼

Value

2040 ✎

Cancel   Apply

Select the *Field* type of **Taskcode**, *Condition* **=** and *Value* of **2040**. This will mean that any changes are only applied to screens within this specific task. Select *Apply*.

Select the *Add Action* icon above the *Actions* grid.

Edit Action

Action

Compress Whitespace ▼

Cancel | **Apply**

Set the *Action* to **Compress Whitespace**. No *Value* is required. Click *Apply*.

Add another Action.

Edit Action

Action

Compress Buttons ▼

Cancel | **Apply**

Set the *Action* to **Compress Buttons**. No *Value* is required. Click *Apply*.

Add another Action.

Set the *Action* to **Add Window Title Area**. Click the prompt icon next to the *Value* field and enter a Window Title Area.

Edit Window Title Area

Start Position:

Top

| - | 2 | + |

Left

| - | 0 | + |

End Position:

Bottom

| - | 2 | + |

Right

| - | 50 | + |

| Cancel | Select |

Click *Select.*

Edit Action

Action

Add Window Title Area

Value

Area (2,0 to 2,50)

| Cancel | Apply |

Click *Apply.*

Add another Action.

Set the *Action* to **Remove Stops**. No *Value* is required. Click *Apply*.

Add another Action.

Set the *Action* to **Clip Top Lines**. Set the *Value* to **2**. Click *Apply*.

Edit Rule

Tests

Field	Condition	Value
Application	=	PL
Taskcode	=	2040

Actions

Action	Value
Compress Whitespace	
Compress Buttons	
Add Window Title Area	Area (2,0 to 2,50)

Cancel   **Apply**

Click *Apply*.

Define Rules

Rules   +   ✎   🗑   🗐

When the current application is Equal To PL and when the current taskcode is Equal To 2040 then compress empty rows of data (Whites

When the current application is Equal To PL and when the current taskcode is Equal To 2040 then compress empty rows of data (Whitespace), re-align buttons so they appear on the bottom two rows of the screen, add any fields within area (2,0 to 2,50) to the beginning of the Window Title, remove all trailing full stops after labels, clip the top 2 rows

Cancel	Apply

Click *Apply* (which will create a new Global Rules Screen design within your current Infor System I Workspace AnyWhere Profile).

Select *File – Exit*.

Now, at run-time, users will see the *Invoice Posting* screen like so…

☰	System i Home	Direct posting

Invoice Posting -   ✎   Actions ▾   🧰 ▾   ⚙   ?
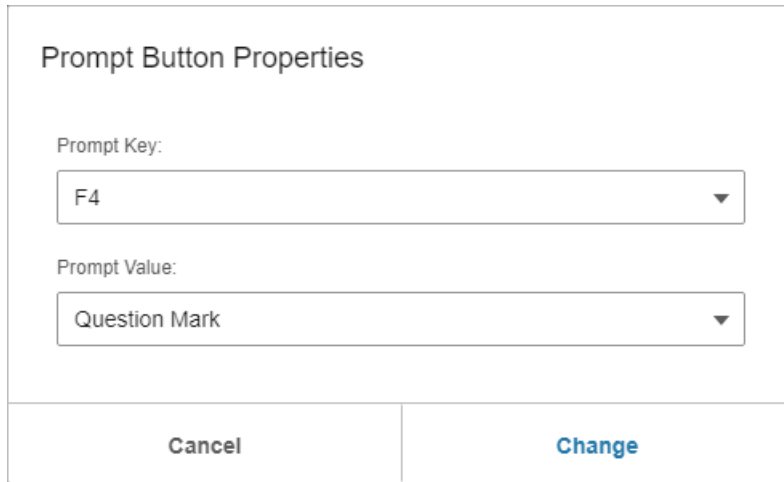
A/P Session   2391
G/L Session   3071

Supplier ?

Text

Supplier search	End session	Review batch controls	Review session	Cancel session

The other screens within 11/APP will have the same Global Rule changes applied.
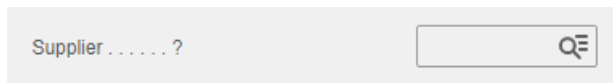
Select the *Design This Screen* button to re-enter design mode

Move the mouse cursor over the Edit field to the right of the *Supplier* Label and click the right-mouse button. Select *Show As Prompt Field* from the context menu.
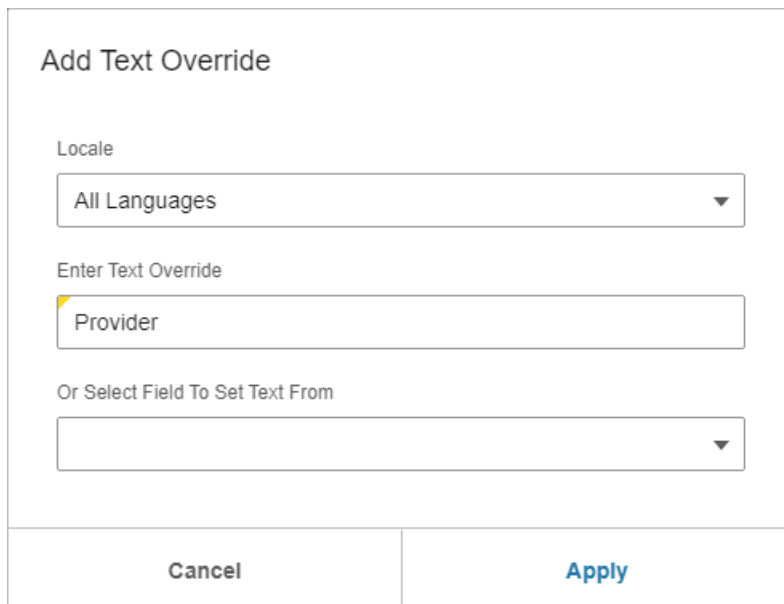
Prompt Button Properties

Prompt Key:

F4 ▼

Prompt Value:

Question Mark ▼

Cancel   **Change**

Click *Change*. A prompt is added next to the Edit field.
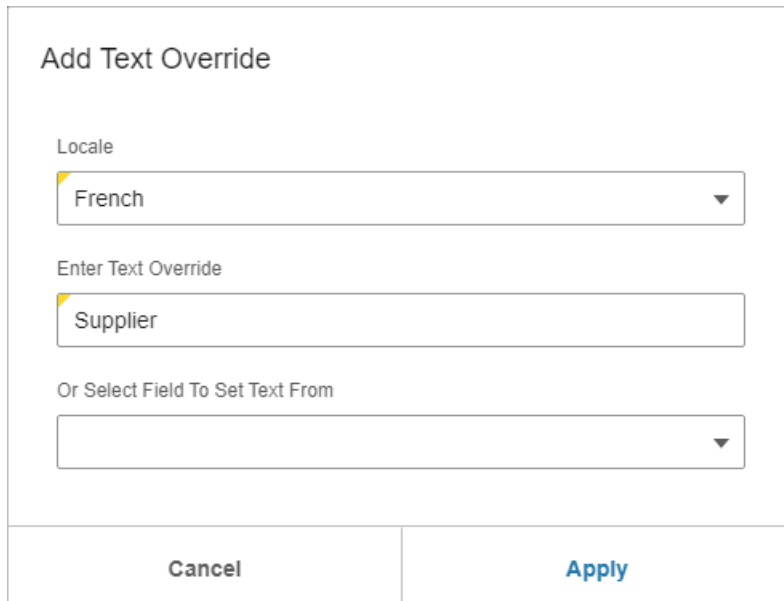
Supplier . . . . . . ?   ⌖

For this example, we will rename the *Supplier* label to *Provider* except for French users. Move the mouse cursor over the *Supplier* Label, press the right-mouse button and select *Edit Text* from the context menu. The *Edit Field Text* dialog is displayed. Click the *Add Text Override* icon from the toolbar.

Add Text Override

Locale

All Languages ▼

Enter Text Override

Provider

Or Select Field To Set Text From

▼

Cancel   **Apply**

From the *Locale* dropdown field, select **All Languages**. In *Enter Text Override* field, enter **Provider**. Click Apply.
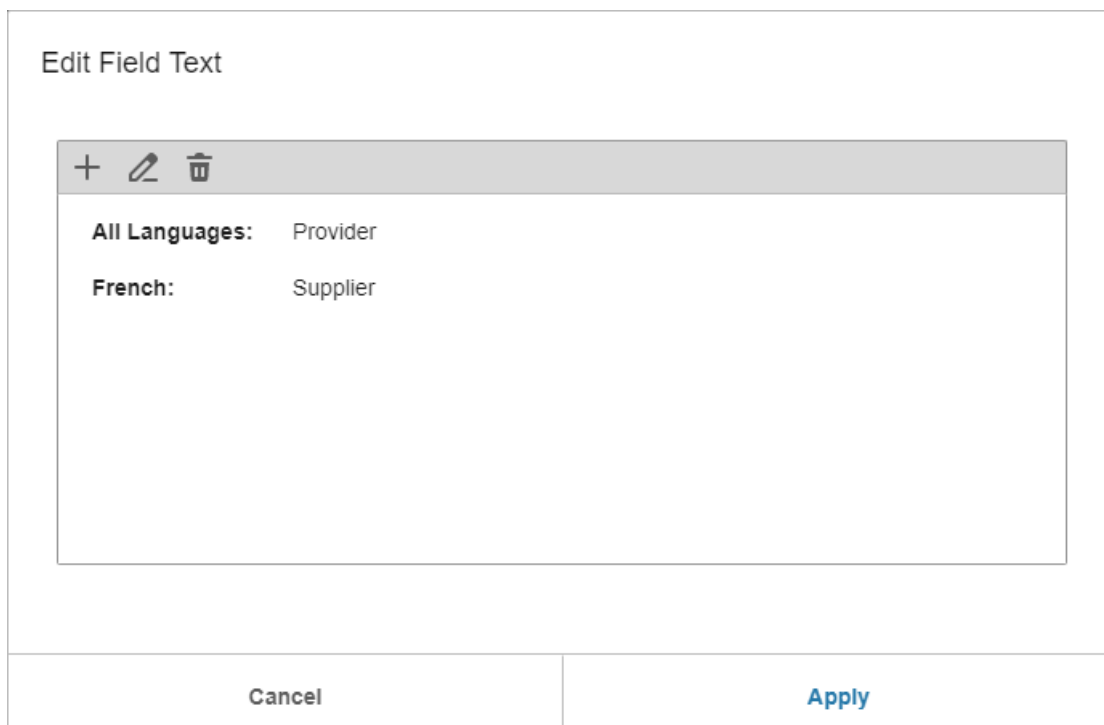
The *Edit Field Text* dialog is re-displayed. Click the *Add Text Override* icon from the toolbar.

Add Text Override

Locale

French ▾

Enter Text Override

Supplier

Or Select Field To Set Text From

▾

Cancel   **Apply**

From the *Locale* dropdown field, select **French**. In *Enter Text Override* field, enter **Supplier**. Select *Apply*.

Edit Field Text

+ ✎ 🗑

All Languages: Provider

French: Supplier

Cancel   **Apply**

Click *Apply* to update the text override into the design.
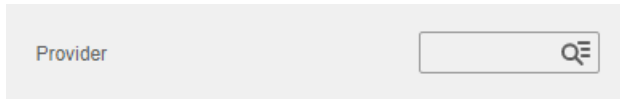
We can change the Edit field next to the *Text* Label by right-clicking on the Edit field and selecting *Show As Check Box* from the Context Menu. The field will be changed to a check box.

Select *File – Save* and then *File – Exit*.

Now, at run-time, non-French users will see the *Invoice Posting* screen like so…
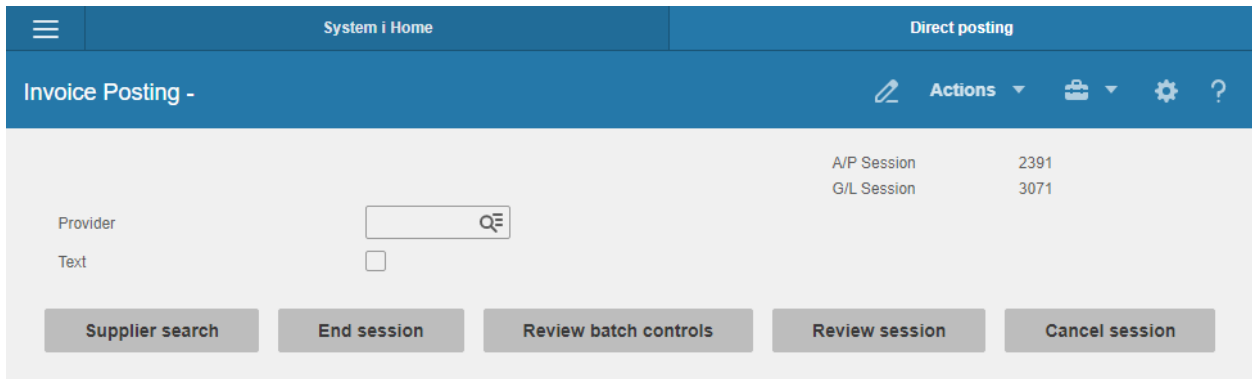
French users will see the same screen design, except the label *Provider* will say *Supplier*.

When the user presses the prompt button, they will be presented with the Supplier Selection popup.

Supplier Selection: by account code

Search Argument			More:	+
1 Account	Name & Address		Alpha seq.	
ACCOUNT	test cash on account|1 High St|		TESTING1	
ACCOUNT1	test cash on account|1 High St|		TESTING1	
ACHSUPPC	Angus Consignment Supplier|		ACH	
ACHSUPP1	Angus Supplier|		ACH	
ACQVATSP	Acquisition Vat Supplier|Acquisition House|Acquisiti		ACQVAT	
ADHOC	Test ad hoc payments and held|1 High St|		ADHOC	
AITEST	Premier Food and Drug Supplies|Premier House|Eastcot		#RUGSP	
AITEST01	Premier Food and Drug Supplies|Premier House|Eastcot		DRUGSP	
AITEST1	Premier Food and Drug Supplies|Premier House|Eastcot		#RUGSP	
APP	Test APY fix|1 High St|test|		TEST	

1=Select

Previous	Search on IBAN
Search on bank account	Alpha search on supplier name
Position to...alpha sequence	Position to...account code

Select an *Account* (by inserting 1 into the desired box) and on the *Invoice Posting* screen, press **Enter**.

The Invoice Posting Screen (Two)

Select the *Design This Screen* button to enter design mode

Let's add a Date Picker control to the *Tax Date* field where the date format is Day, Month, Year for English users but Month Day Year for all other languages.

Move the mouse cursor over the Edit field next to the *Tax Date* Label, press the right-mouse button and select *Show as Date Field* from the context menu. The *Edit Date Field* dialog is displayed. Click the *Add Date Conversion Format* from the toolbar.

Add Date Conversion Format

Locale

English ▼

Date Input Formats:

DD/MM/YY;DDMMYY ▼

Date Output Format:

DDMMYY ▼

| Cancel | Apply |

From the *Locale* dropdown list, select **English**. From the *Date Input Formats* drop-down list, select **DD/MM/YY;DDMMYY**. From the *Date Output Format* drop-down list, select **DDMMYY**. Click *Apply*.

The *Edit Date Field* dialog is re-displayed. Click the *Add Date Conversion Format* from the toolbar.

Add Date Conversion Format

Locale

All Languages ▼

Date Input Formats:

MM/DD/YY;MMDDYY ▼

Date Output Format:

MMDDYY ▼

| Cancel | Apply |

From the *Locale* dropdown list, select **All Languages**. From the *Date Input Formats* drop-down list, select **MM/DD/YY;MMDDYY**. From the *Date Output Format* drop-down list, select **MMDDYY**. Click *Apply*.

Edit Date Formats

+ ✎ 🗑

English:	Input: DD/MM/YY;DDMMYY
	Output: DDMMYY
All Languages:	Input: MM/DD/YY;MMDDYY
	Output: MMDDYY

Cancel   **Apply**

Click *Apply*. A Date Picker will appear next to the *Tax Date* Label field.

Tax date . .   [📅]

Repeat for the Edit field next to the *Doc. Date* Label field.

Repeat for the Edit field next to the *Due Date* Label field.

> **Caution:** For multi-lingual date support, we would normally recommend the use of the System Manager data formats for all languages/locales, which uses the date format configured in System i Manager for each user profile to convert dates from/to the IBM i application in the correct D, M or Y format. The example is just to show an alternate way for multi-lingual date conversion.

Let's now add a new button to the screen so that the user can perform a Supplier Enquiry (1/APE) on the current supplier.

Select the *Buttons – Add Button* menu option. Select *Task Button* and click *Select*.

Task Button Properties

Task Shortcut or System i Command:

1/APE

Overrides   +   🖵   ✎   🗑

Screen	Target	Value

No Data Available

Cancel	Select

Enter **1/APE** as the *Task Shortcut*.

From the Overrides grid toolbar, select the *Add Screen Field or Designer Variable* 🖵 icon.

Override Properties

Screen ID:

Target Input Field Index:

0

Override Value:

Output Field Row: 7 Column:12 (GS01) ▾

☐ Only use a Sub-section of this Override Value

Start Position: Sub-section Length:

| - | 1 | + | | - | 1 | + |

Cancel   **Change**

Set the *Target Input Field Index* to **0** (i.e. the first input field on the screen) and from *the Override Value* drop-down list, select the output field that holds the Supplier Code.

Click *Change* to accept the override.

From the Overrides grid toolbar, select the *Add Fixed Value* ✛ icon.

Override Properties

Screen ID:

Target Input Field Index:

F

Override Value:

0

Cancel   **Change**

Set the *Target Input Field Index* to **F** and set the *Override Value* to **0**. This will activate the Enter key on the first screen of the Supplier Enquiry task.

Click *Change* to accept the override.

From the Overrides grid toolbar, select the *Add Fixed Value* ✛ icon.

Override Properties

Screen ID:

Target Input Field Index:

H

Override Value:

1

Cancel	Change

Set the *Target Input Field Index* to **H** and set the *Override Value* to **1**. This will hide the first screen of the Supplier Enquiry task.

Click *Change* to accept the override.

Task Button Properties

Task Shortcut or System i Command:

1/APE
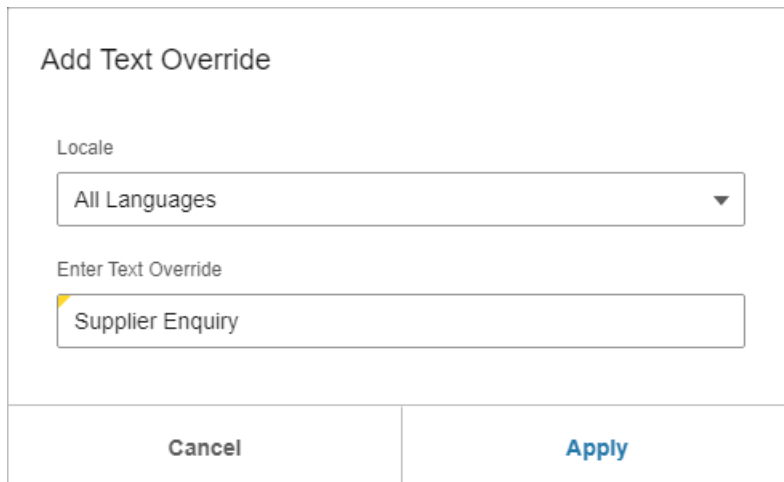
Overrides

Screen	Target	Value
	0	Field Row: 7, Column: 12
	F	0
	H	1
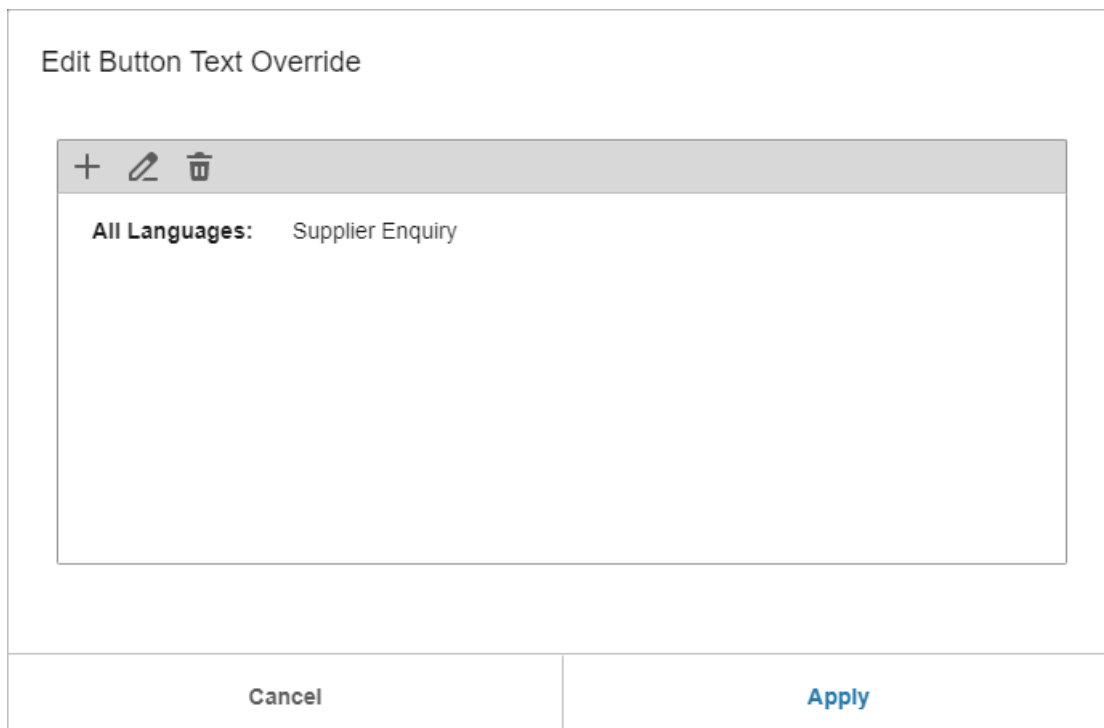
Cancel	Select

In the *Task Button Properties* dialog, click *Select*. The *Edit Button Text Override* dialog will appear, select the *Add Text Override* icon from the toolbar.

Add Text Override

Locale

All Languages ▼

Enter Text Override

Supplier Enquiry

Cancel   **Apply**

Enter **Supplier Enquiry** into the *Enter Text Override.* Click *Apply.*

Edit Button Text Override

＋ ✎ 🗑

All Languages: Supplier Enquiry

Cancel   **Apply**

Click *Apply* to add the Task Button to the design.

As we have turned on Button Compression, the button will be automatically moved at runtime to the bottom of the screen.

To differentiate this from the previous *Invoice Posting* screen, let's add a new label to be appended to the Window Title. From the *Fields* menu, select *Add Field*. The *Add Field* dialog will appear, select the *Add Text Override* icon from the toolbar.

Add Text Override

Locale

All Languages

Enter Text Override

Details

Or Select Field To Set Text From

| Cancel | Apply |

Enter **Details** in the *Enter Text Override* field. Click *Apply*.

Add Field

+ ✎ 🗑

All Languages: Details

| Cancel | Apply |

Click *Apply*.

A new Label will be added to the screen.

Right-click on the new Label and select *Use As Part Of Window Title* from the Context Menu. The *Edit Fields Used For Window Title* dialog will open. Click Close.

Right-click on the new Label and select *Hide Field* from the Context Menu. The label will be hidden but still used as part of the Window Title.

To prevent the AP Session label from being clipped on this screen by the Global Rule we defined earlier, select the *Screen – Override Row Clipping* option.

Uncheck the *Use Default* option and change the *Clip top lines* field to *1*. Select *Change*.

To complete the design for this screen, add Prompt Buttons to the *Currency*, *Dis. Code*, *Ext terms, P/M* and *Distribute* Edit fields as described in the previous section.

Select *File – Save* and then *File – Exit*.

Now, at run-time, users will see the *Invoice Posting* screen like so…

Users can use the Date Picker, to set the *Tax date*, e.g.

When the user selects a *Supplier Enquiry* Button, the task will open in a new tab and automatically navigate to the second screen, e.g.
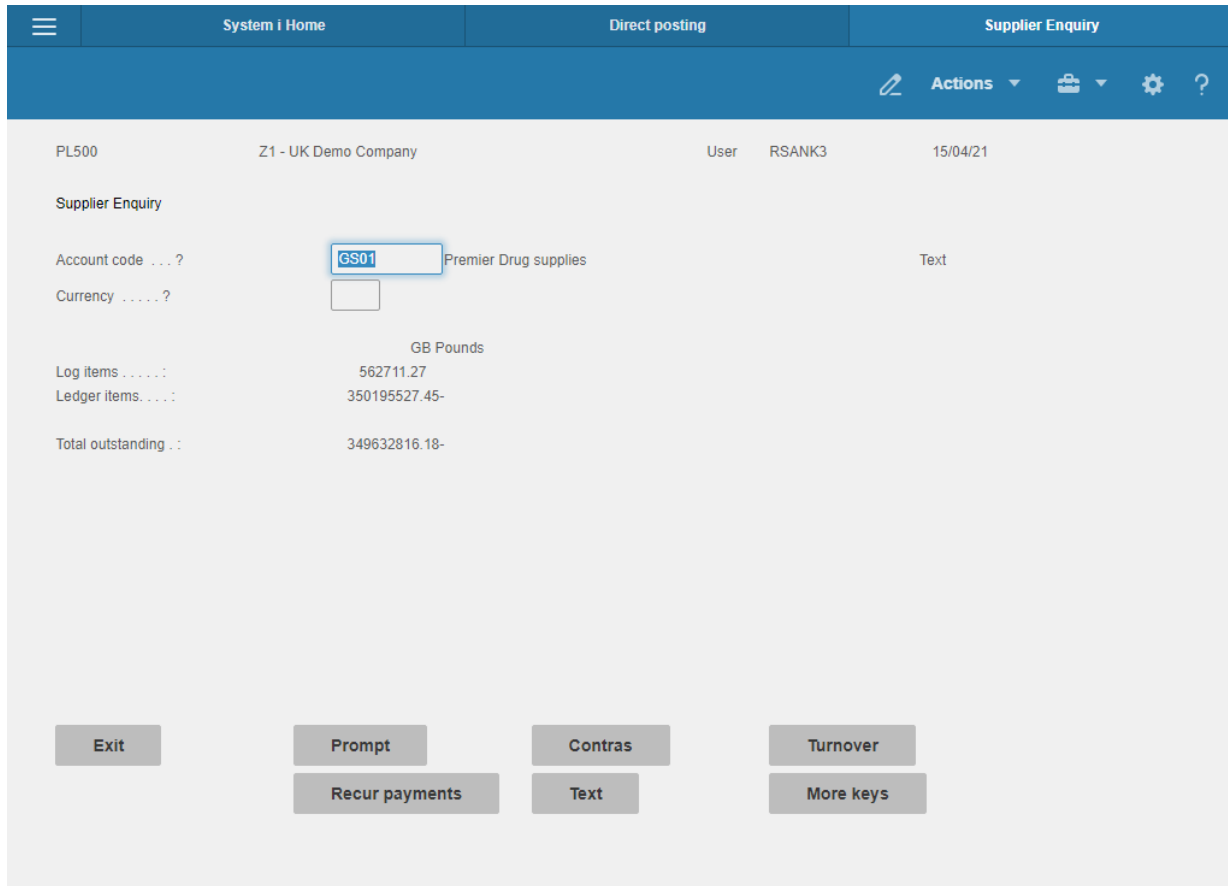
In the *Invoice Posting* screen, press *F23 to fire the Cancel Session* option.

The Confirm Cancellation Screen (Skip Screen)
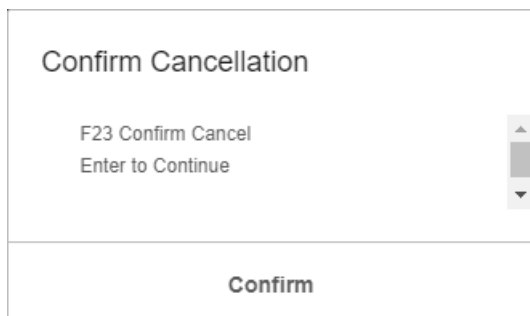
Let's change this screen so that it is hidden from the user and the 5250 AnyWhere Emulator auto-confirms the F23 option.

Right-click on the popup and select *Design This Screen* from the Context Menu to enter design mode.

The popup is shown within the Designer window with its edges drawn as a black border, e.g.
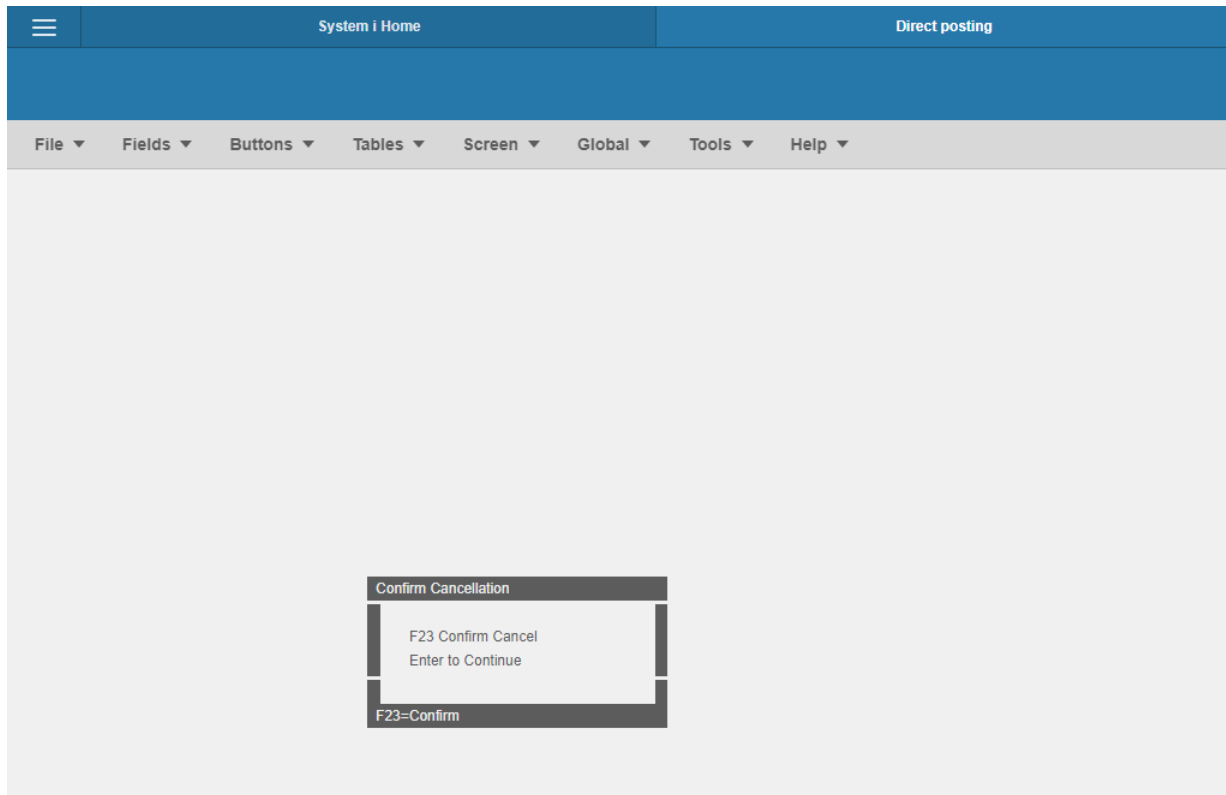
Select the *Screen – Pass Over This Screen* menu option.

Pass Over This Screen

☑ Hide Screen

Action Key To Press To Skip Screen:

F23 ▼

Previous Screen ID:

☑ Any   ☐ Entry Point Panel

Cancel	Reset	**Change**

Check the *Hide Screen* field. Select **F23** from the *Action Key To Press To Skip Screen* dropdown list. Leave **Any** field checked. Click *Change*.

Select *File – Save* and then *File – Exit*.

At run-time, this screen will never be accessible to a user. When they select the *F23 Cancel Session* option on the *Invoice Posting* screen, they will be taken back to the *Ledger Posting* screen immediately where they can press F3 to end the Direct Posting application.

Maintain Log Items (Table and Export)

For this example, we will be using the **Maintain Log Items** application (4/APP).

Enter valid *Supplier Codes* (or prompt using a ? character and F4) into the *From* and *To* fields. Select *Supplier Codes* that have *Log Item* data already recorded against them. Press *Enter* to get a list of *Log Items* for the *Supplier Codes*.

≡	**System i Home**			**Maintain log items**			

✎   **Actions** ▾   🧰 ▾   ⚙   ?

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                                                                         13:26:12

Maintain Log Items

Item	Document	Supplier	Current	Outstanding	Cur
* Type & Ref.	Date		Location		
☐ CR 00000170	15/04/11	GS01		.00	GBP
☐ CR 00000172	15/04/11	GS01		999.00-	GBP
☐ CR 00000173	15/04/11	GS01		555.00-	GBP
☐ CR 00000208	15/04/11	GS01		2181.15	GBP
☐ IN 00000147	15/04/11	GS01		2220.00	GBP
☐ IN 00000149	15/04/11	GS01		2220.00	GBP
☐ IN 00000150	15/04/11	GS01		4440.00	GBP
☐ IN 00000151	15/04/11	GS01		12876.00	GBP
☐ IN 00000153	15/04/11	GS01		4440.00	GBP
☐ IN 00000154	15/04/11	GS01		5550.00	GBP
☐ IN 00000155	15/04/11	GS01		2220.00	GBP
☐ IN 00000156	15/04/11	GS01		2220.00	GBP
☐ IN 00000157	15/04/11	GS01		.00	GBP +

1=Select 2=Item details

Exit	Previous

Select *Design This Screen* to enter design mode.

Select the *Tables – Define a Table* option to enter *Define Table Mode*.

Move the mouse to the top-left corner of the table area.

Press and hold down the left button then move the mouse to the bottom-right corner of the table area. The screen should look like the following whilst the mouse is held down…

☰	System i Home		Maintain log items

File ▾	Fields ▾	Buttons ▾	Tables ▾	Screen ▾	Global ▾	Tools ▾	Help ▾

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Maintain Log Items

	Item * Type & Ref.	Document Date	Supplier	Current Location	Outstanding	Cur
☐	CR 00000170	15/04/11	GS01		.00	GBP
☐	CR 00000172	15/04/11	GS01		999.00-	GBP
☐	CR 00000173	15/04/11	GS01		555.00-	GBP
☐	CR 00000208	15/04/11	GS01		2181.15	GBP
☐	IN 00000147	15/04/11	GS01		2220.00	GBP
☐	IN 00000149	15/04/11	GS01		2220.00	GBP
☐	IN 00000150	15/04/11	GS01		4440.00	GBP
☐	IN 00000151	15/04/11	GS01		12876.00	GBP
☐	IN 00000153	15/04/11	GS01		4440.00	GBP
☐	IN 00000154	15/04/11	GS01		5550.00	GBP
☐	IN 00000155	15/04/11	GS01		2220.00	GBP
☐	IN 00000156	15/04/11	GS01		2220.00	GBP
☐	IN 00000157	15/04/11	GS01		.00	GBP	+

Start: 4,0 - End: 19,75

1=Select 2=Item details _____

Exit	Previous

Release the mouse button to set the area and automatically open the Table Wizard.

Define Table Properties

Step 1 of 5: Table Structure

Start Position:

Top   Left

[-] 4 [+]   [-] 0 [+]

End Position:

Bottom   Right

[-] 19 [+]   [-] 75 [+]

Number Of Rows To Use As Header:

[-] 3 [+]

☐ Each Table Row Uses More Than One Screen Row:

[-] 2 [+]

| Cancel | Previous | Next |

Set the *Number of Rows to Use as Header* field to **3** and adjust the table area dimensions, if required.

Click *Next* to move to the *Column Layout* step.

Define Table Properties

Step 2 of 5: Column Layout

Column Definitions   + ✎ 🗑

Column Heading	Start Column	End Column	Length
* Type & Ref.	1	1	1
Item	3	4	2
Column: 3	6	13	8
Document Date	16	23	8
Supplier	26	33	8
Outstanding	54	70	17

| Cancel | Previous | Next |

Move the mouse over the second grid row (*Item*) and press the left mouse button to select it. Select *Delete Column* from the *Column Definitions* grid toolbar.

Move the mouse over the second grid row (*Column: 3*) and press the left mouse button to select it. Select *Edit Column* from the *Column Definitions* grid toolbar.

Edit Table Column Properties

Column Start Position:

| - | 3 | + |

Column End Position:

| - | 13 | + |

| Cancel | Select |

Change the *Column Start Position* field to **3** and click *Select*.

Select *Add Column* from the *Column Definitions* grid toolbar.

Edit Table Column Properties

Column Start Position:

| - | 35 | + |

Column End Position:

| - | 52 | + |

| Cancel | Select |

Change the *Column Start Position* field to **35** and *Column End Position* to **52** then click *Select*.

Click *Next* to move to the *Column Format* step.

Define Table Properties

Step 3 of 5: Column Format

Column Format Properties

	Column Heading	Column Data Format	Exportable	Column Width
⋮	* Type & Ref.	Text	Yes	Default
⋮	Column: 3	Text	Yes	Default
⋮	Document Date	Date	Yes	Default
⋮	Supplier	Text	Yes	Default
⋮	Column: 6	Text	Yes	Default
⋮	Outstanding	Text	Yes	Default

Cancel	Previous	Next

Move the mouse over the first grid row (* *Type & Ref*). Press the left mouse button to highlight it and select *Edit Column Heading* from the *Column Format Properties* grid toolbar. The *Edit Column Heading* dialog is displayed. Click the Add Column Heading from the toolbar.

Add Column Heading

Locale

All Languages

Heading Text:

Select

Cancel	Apply

Change the *Heading Text* field to **Select** and click *Apply*. Click *Apply* again to close the *Edit Column Heading* dialog.

Select *Edit Column Format Properties* from the *Column Format Properties* grid toolbar.

In the *Set This Column as Exportable* field, select the **Never** option so this field will not be exportable by the user. Uncheck the *Column Width* field's **Default** option and check the **Automatic** option. Click *Select*.

Use the *Edit Column Heading* and *Properties* options against the remaining rows so that they match the following *Column Format* settings…

Define Table Properties

Step 3 of 5: Column Format

Column Format Properties

	Column Heading	Column Data Format	Exportable	Column Width
⋮	Item Type & Reference	Text	Yes	Default
⋮	Document Date	Date	Yes	Default
⋮	Supplier	Text	Yes	Default
⋮	Current Location	Text	No	Automatic
⋮	Outstanding	Numeric	Yes	Default
⋮	Currency	Text	Yes	Automatic

Cancel	Previous	Next

Click *Next* to move to the *Export Properties* step.

Define Table Properties

Step 4 of 5: Export Properties

☑ Navigate To Top Of Table Before Exporting Data

☐ Limit The Number Of Rows To Retrieve

[- | 1 | +]

☐ Use An Indicator Character To Denote End-Of-Table

Name For This Table:

Log Items For Supplier

Cancel	Previous	Next

Check the *Navigate to Top of Table before Exporting Data* field.

Set the *Name for This Table* field to a unique name.

Click *Next* to move to the *Display Properties* step.

Define Table Properties

Step 5 of 5: Display Properties

☑ Alternate Row Background Fill Colour

☐ Fill First Column With Header Background Colour

Cancel	Previous	Finish

Select the style options for your table within the display.

Click *Finish* to save the Table Definition.

The Table will be created within the design area, e.g.

	System i Home		Maintain log items

File ▼	Fields ▼	Buttons ▼	Tables ▼	Screen ▼	Global ▼	Tools ▼	Help ▼

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                                        13:26:12

Maintain Log Items

Select	Item Type & Reference	Document Date	Supplier	Current Location	Outstanding	Currency
☐	CR 00000170	15/04/11	GS01		.00	GBP
☐	CR 00000172	15/04/11	GS01		999.00-	GBP
☐	CR 00000173	15/04/11	GS01		555.00-	GBP
☐	CR 00000208	15/04/11	GS01		2181.15	GBP
☐	IN 00000147	15/04/11	GS01		2220.00	GBP
☐	IN 00000149	15/04/11	GS01		2220.00	GBP
☐	IN 00000150	15/04/11	GS01		4440.00	GBP
☐	IN 00000151	15/04/11	GS01		12876.00	GBP
☐	IN 00000153	15/04/11	GS01		4440.00	GBP
☐	IN 00000154	15/04/11	GS01		5550.00	GBP
☐	IN 00000155	15/04/11	GS01		2220.00	GBP
☐	IN 00000156	15/04/11	GS01		2220.00	GBP
☐	IN 00000157	15/04/11	GS01		.00	GBP

1=Select 2=Item details

Exit	Previous

Select *File – Save* and *File – Exit* to leave Designer.

Click the ▤ icon on the toolbar or press the right mouse button within the 5250 AnyWhere Emulator screen and select *Export – Export To A Microsoft Excel Workbook* from the Context Menu to export the data to Microsoft Excel compatible file.

When the export process is complete, the retrieved data will be shown in the *Export Data* dialog….

Export Data (read 101 rows of data)

Filtered Results (101 results)   **...**

Item Type & Reference	Document Date	Supplier	Outstanding	Currency
[A] ▾	[A] ▾	[A] ▾	= ▾	[A] ▾
CR 00000170	15/04/11	GS01	0.00	GBP
CR 00000172	15/04/11	GS01	-999.00	GBP
CR 00000173	15/04/11	GS01	-555.00	GBP
CR 00000208	15/04/11	GS01	2,181.15	GBP
IN 00000147	15/04/11	GS01	2,220.00	GBP
IN 00000149	15/04/11	GS01	2,220.00	GBP
IN 00000150	15/04/11	GS01	4,440.00	GBP
IN 00000151	15/04/11	GS01	12,876.00	GBP
IN 00000153	15/04/11	GS01	4,440.00	GBP
IN 00000154	15/04/11	GS01	5,550.00	GBP
IN 00000155	15/04/11	GS01	2,220.00	GBP
IN 00000156	15/04/11	GS01	2,220.00	GBP
IN 00000157	15/04/11	GS01	0.00	GBP
IN 00000158	15/04/11	GS01	4,478.85	GBP
IN 00000150	15/04/11	GS01	0,000.00	GBP

| Close | Export |

Caution: See the Infor System I Workspace AnyWhere Product Guide for more information on filtering data and showing/hiding columns within this dialog.

Click *Export* to download the data to your browser's file repository where it can be opened in Microsoft Excel (or other spreadsheet products that can read CSV files), e.g.

Screen Validation Rules

For this example, we will be re-using the second Invoice Posting screen from the **Direct Posting** application (11/APP) that was designed in previous tutorial steps.

To show how Screen Validation Rules can be used to provide bespoke validation to a standard IBM i application, let us add a new set of Validation Rules to the *Supp ref.* field so that it cannot be blank and must contain a reference with a specific format.

Navigate to the Invoice Posting details screen and enter Designer.

Select the *Screen – Define Screen Validation* menu option. The Define Validation Rules dialog will open.

Select the *Add Rule* option from the *Rules* grid toolbar. The *Edit Rule* dialog will open.

Select the *Add Test* option from the *Tests* grid toolbar. The *Edit Test* dialog will open.

Edit Test

Field

Last Actioned Key

Condition

=

Value

Enter

Cancel   Apply

Select **Last Actioned Key** from the *Field* dropdown list, select **=** from the *Condition* dropdown list, use the prompt icon to set the *Value* to **Enter**. This will cause this Validation Rule to only fire when the user presses the Enter to key in the IBM i application screen. Click *Apply*.

Select the *Add Test* option from the *Tests* grid toolbar. The *Edit Test* dialog will open.

Edit Test

Field

Input Field Row: 11 Column:58 ()

Condition

=

Value

Cancel   Apply

Select **Input Field Row: 11 Column 58** from the *Field* dropdown list, select **=** from the *Condition* dropdown list, leave the *Value* empty. This will cause this Validation Rule to only fire when the user fails to enter a value into this field. Click *Apply*.

Select the *Add Action* option from the *Actions* grid toolbar. The *Edit Action* dialog will open.

Edit Action

Action

Show Error Message ▼

Field

▼

Value

The Supplier Reference field cannot be blank.

Cancel   **Apply**

Select **Show Error Message** from the *Action* dropdown list, set the *Value* to a suitable error message as shown in the screenshot above. Click *Apply*.

Edit Rule

Tests

Field	Condition	Value
Last Actioned Key	=	Enter
Input Field Row: 11 Column:58 ()	=	

When the last Actioned Key is Equal To Enter.

Actions

Action	Field	Value
Show Error Message		The Supplier Reference field cannot be blank.

Show the Error Message 'The Supplier Reference field cannot be blank.' and do not proceed.

Cancel	Apply

Click *Apply*.

Define Validation Rules

Rules

When an Action occurs and when the last Actioned Key is Equal To Enter and when input Field Row: 11 Column:58 () is Equal To then sh

When an Action occurs and when the last Actioned Key is Equal To Enter and when input Field Row: 11 Column:58 () is Equal To then show the Error Message 'The Supplier Reference field cannot be blank.' and do not proceed.

Cancel	Apply

Click *Apply*.

Select *File – Save* and *File – Exit* to leave Designer.

At run-time, if the user forgets to enter a supplier reference, and presses the Enter key, the Validation Rule will fire and show the defined error message, e.g.
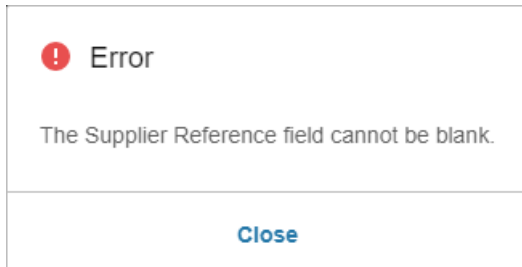
Let us now add a more complex Validation Rule that will prevent the user from proceeding unless they enter a specific supplier reference. For this example, the supplier reference must be 2 digits, a dash five alpha characters, a dash and 3 digits (e.g. 00-SUPP1-123).

Re-open Designer on the Invoice Posting Details screen of 11/APP.

Select the *Screen – Define Screen Validation* menu option. The Define Validation Rules dialog will open.

Select the *Add Rule* option from the *Rules* grid toolbar. The *Edit Rule* dialog will open.

Select the *Add Test* option from the *Tests* grid toolbar. The *Edit Test* dialog will open.

Select **Last Actioned Key** from the *Field* dropdown list, select **=** from the *Condition* dropdown list, use the prompt icon to set the *Value* to **Enter**. This will cause this Validation Rule to only fire when the user presses the Enter to key in the IBM i application screen. Click *Apply*.

Select the *Add Test* option from the *Tests* grid toolbar. The *Edit Test* dialog will open.

Edit Test

Field

Input Field Row: 11 Column:58 ()

Condition

Does not match Regular Expression

Value

^\d{2}-[a-z,A-Z]{5}-\d{3}$

Cancel   **Apply**

Select **Input Field Row: 11 Column 58** from the *Field* dropdown list, select **Does not match Regular Expression** from the *Condition* dropdown list, set the *Value* to **^\d{2}-[a-z,A-Z]{5}-\d{3}$**. This will cause this Validation Rule to only fire when the user fails to enter the valid reference syntax, as defined by the Regular Expression value into this field. Click *Apply*.

Select the *Add Action* option from the *Actions* grid toolbar. The *Edit Action* dialog will open.

Edit Action

Action

Show Error Message

Field

Value

The Supplier Reference field must be in the format of DD-AAAAA-DDD.

Cancel   **Apply**

Select **Show Error Message** from the *Action* dropdown list, set the *Value* to a suitable error message as shown in the screenshot above. Click *Apply*.

Edit Rule

Tests   + ✎ 🗑

Field	Condition	Value
Last Actioned Key	=	Enter
Input Field Row: 11 Column:58 ()	does not match Regular Expression	^\d{2}-[a-z,A-Z]{5}-\d{3}$

When input Field Row: 11 Column:58 () does not match Regular Expression ^\d{2}-[a-z,A-Z]{5}-\d{3}$.

Actions   + ✎ 🗑

Action	Field	Value
Show Error Message		The Supplier Reference field must be in the format of DD-AAAAA-DDD.

Show the Error Message 'The Supplier Reference field must be in the format of DD-AAAAA-DDD.' and do not proceed.

Cancel	Apply

Click *Apply*.

Define Validation Rules

Rules   + ✎ 🗑 🖫

When an Action occurs and when the last Actioned Key is Equal To Enter and when input Field Row: 11 Column:58 () is Equal To then sh

When an Action occurs and when the last Actioned Key is Equal To Enter and when input Field Row: 11 Column:58 () does not match Re

When an Action occurs and when the last Actioned Key is Equal To Enter and when input Field Row: 11 Column:58 () does not match Regular Expression ^\d{2}-[a-z,A-Z]{5}-\d{3}$ then show the Error Message 'The Supplier Reference field must be in the format of DD-AAAAA-DDD.' and do not proceed.

Cancel	Apply

Click *Apply*.

Select *File – Save* and *File – Exit* to leave Designer.

At run-time, if the enters an invalid supplier reference, and presses the Enter key, the Validation Rule will fire and show the defined error message, e.g.
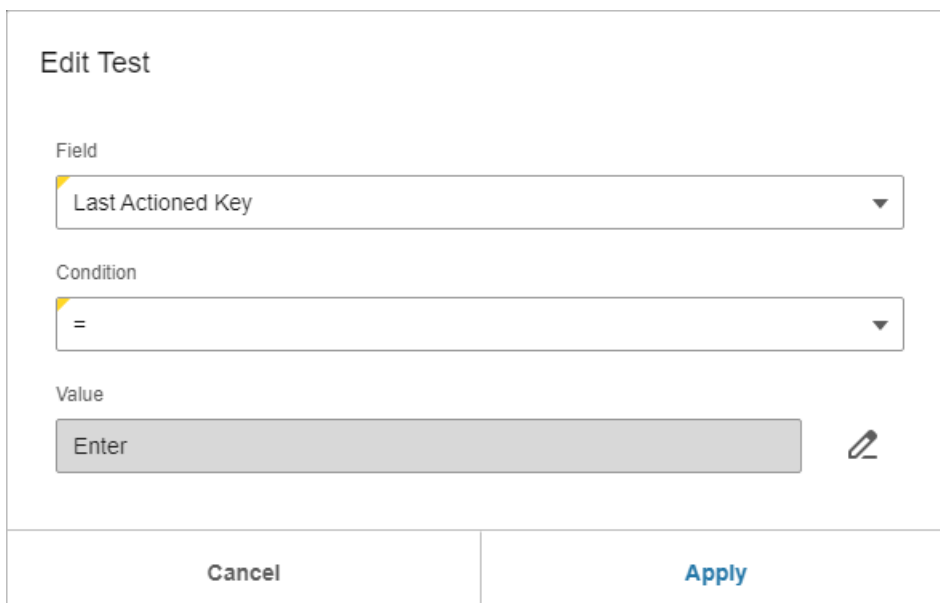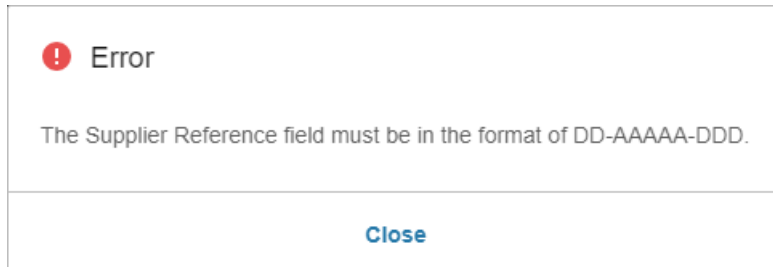

Using Designer Variables

For this example, we will be using the **Whole Order Enquiry** application (1/OEE) as this is a program that many Infor ERP System21 3.1 customers use.

Start the Whole Order Enquiry task and enter Designer.

Select the *Global – Define Global Variables* menu option.

Select the *Add Variable* option from the *Variables* grid toolbar.

Edit Designer Variable

Name:

Order Number

Description:

Last OE Order Number

☐ Session Specific   ☐ Clear On Use

☐ Clear On Task Start   ☐ Do not Save Blank/Empty Field Data

☐ Do not Apply Blank/Empty Field Data

Default Value: Offset (Days):

[▼]   [-] [0] [+]

0000100

Cancel	Apply

Set the *Name* to a unique value.

Set the *Description* to something that will help remind you of what the Designer Variable is used for.

Set a sensible *Default Value* for your IBM i application data usage.

Click *Apply* to create the Designer Variable.

Click *Apply* to save the changes (which will create a new Global Variables screen design within your current Infor System I Workspace AnyWhere Profile).

Back in the main design, right-click on the Edit field next to the Order label and select the *Save To Variable* option from the Context Menu.

In the *Designer Variable* field, select the variable we just created.

In the *When To Save To Variable* field, select the *When a specific Function Key is pressed* option.

Click the ⚙ button.

Select Keys
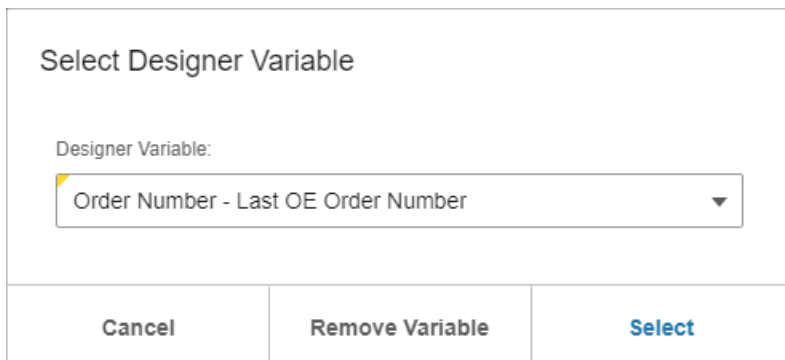
Enter ▼

| Cancel | Select |

Check the *Enter* option in the dropdown list and click *Select.*

Click *Select.*

Right-click on the Edit field next to the Batch Number label and select the *Set From Variable* option from the Context Menu.

Select Designer Variable

Designer Variable:

Order Number - Last OE Order Number ▼
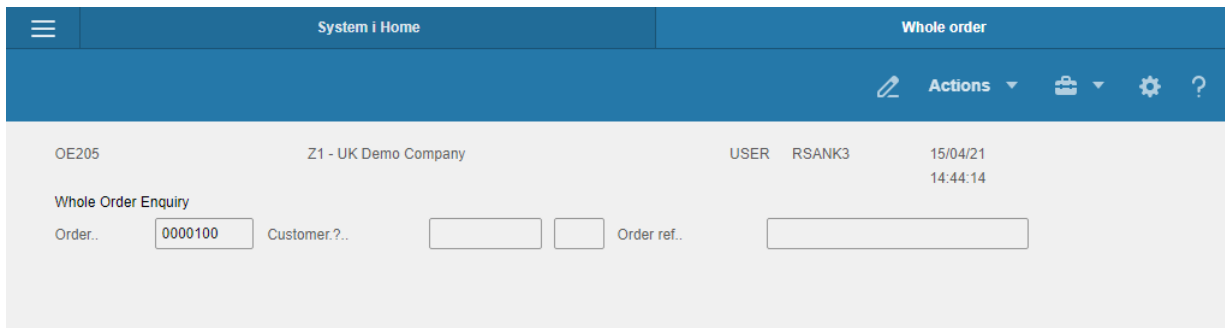
| Cancel | Remove Variable | Select |

In the *Designer Variable* field, select the variable we just created.

Click *Select.*

Select *File – Save* and *File – Exit* to leave Designer.

On first usage of the Whole Order Enquiry Screen, the Order field will be populated with the Designer Variable's Default Value, E.g.

☰	System i Home	Whole order

✎ Actions ▼ 🧰 ▼ ⚙ ?

OE205   Z1 - UK Demo Company   USER   RSANK3   15/04/21
                                                                  14:44:14

Whole Order Enquiry

Order..   `0000100`   Customer.?..   [   ] [   ]   Order ref..   [   ]

On entering a new Order number and pressing Enter, the variable is saved. The next time you come back to this screen, the last order number you used is replayed into the screen, e.g.

On logging out of Infor System I Workspace AnyWhere, the Designer Variable is destroyed, so next time a user logs in and runs 1/OEE for the first time, the Default Value will be used.

Automatically Dismissing a Host Message

For this example, we will show how to auto-dismiss a Host Message across all applications. The Host message we will dismiss is the IBM i Host Message that is shown when the user presses the page up or page down key when already at the top/bottom of a table, e.g.
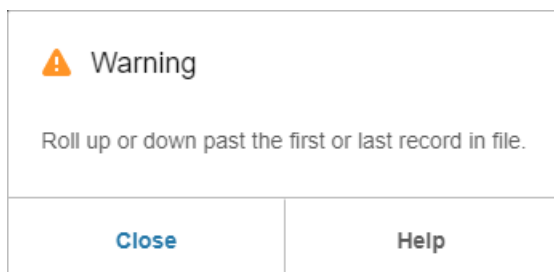
An example of invoking this message can be found in the **Enquire On Session** application (3/APE) which has a table as its first screen. Press **Page Up** to see the message.

To auto-dismiss this message, from any IBM i application screen, select the *Design This Screen* button to enter design mode. Select the *Define Global Rules* option from the *Global* menu.

Select the *Add Rule* option from the *Rules* grid toolbar and select the *Add Test* option from the *Tests* grid toolbar. Enter the following into the *Edit Test* dialog…

Edit Test

Field

Host Message Dialog text ▾

Condition

Contains the Value ▾

Value

roll up or down past   ✐

Cancel	Apply

As we are using the *Contains the value* condition, we do not need to specify the whole message. This will mean that the Rule will work for the message that says "Roll up or down past the first or last record in the file." but also for a message such as "You cannot roll up or down past the end of the table.". Also, the Test comparison is case insensitive so the case used in the Value field does not matter (however if you include punctuation, that **will** affect the comparison)

Click *Apply* and back in the *Edit Rule* dialog, click the *Add Action* option from the *Actions* grid toolbar. Select the *Auto-dismiss Host Message Dialog* Action…

Edit Action

Action

Auto-Dismiss Host Message Dialog ▾

Cancel	Apply

No *Value* is required so click *Apply*. Check your *Edit Rule* dialog matches the one below…

Edit Rule

Tests   + ✎ 🗑

Field	Condition	Value
Host Message Dialog text	Contains the Value	roll up or down past

When the host Message Dialog text Contains the Value roll up or down past.

Actions   + ✎ 🗑

Action	Value
Auto-Dismiss Host Message Dialog	

Auto-dismiss the Host Message Dialog.

| Cancel | **Apply** |

No other Tests or Actions are required so click *Apply*…

Define Rules

Rules + ✎ 🗑 ⮌

When the current application is Equal To PL and when the current taskcode is Equal To 2040 then compress empty rows of data (Whites
When the host Message Dialog text Contains the Value roll up or down past then auto-dismiss the Host Message Dialog.

When the host Message Dialog text Contains the Value roll up or down past then auto-dismiss the Host Message Dialog.

Cancel   **Apply**

Click *Apply* to save the Global Rule and exit Designer (no changes have been made to the actual screen design so you will not be prompted to save).

Now, at runtime, on any IBM i application screen within this Infor System I Workspace AnyWhere profile, if the user performs an action that causes a Host Message Dialog to display, the 5250 AnyWhere Emulator will use the Global Rule we have just created. If the text within the Host Message Dialog contains the text we entered in the Test, the Host Message Dialog will be automatically dismissed. To the user it will be like nothing happened.

This is just a basic example. The Test above could be extended to only be activated when the user is running in a specific language, environment, role, company etc., or combinations of any of the available Test fields.

You can also create multiple Global Rules to identify and hide different messages.

Altering the Format and Display of Numeric Values

For this example, we will be using the **Credit Manager Enquiry** application (1/ARE) as this is a program that many Infor ERP System21 3.1 customers use.
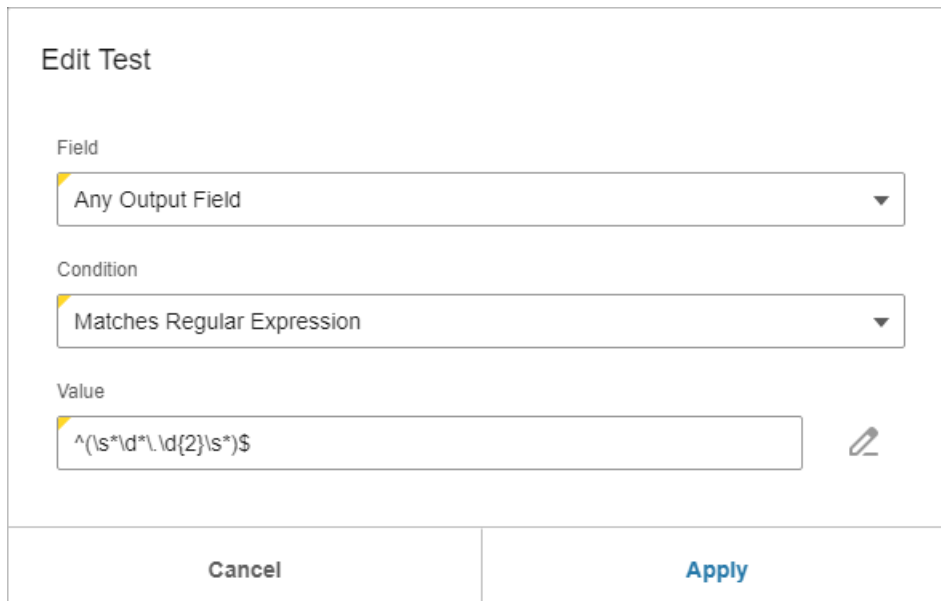
Run the application and enter a valid customer code within the first screen and press *Enter* to take you through to the financial details screen, e.g.

As you can see, there are several decimal values which relate to financial values. We will use a Screen Rule to change the format of these fields and differentiate positive and negative values using color.

To apply these rules, enter Designer and select the *Screen -> Define Screen Rules* option. Create a new Rule. Add a new Test to this Rule. In the *Field* field, select the *Any Output Field* option. In the *Condition* field, select the *Matches Regular Expression* option and in the Value field, enter `^(\s*\d*\.\d{2}\s*)$`, e.g.

This Test will compare every Output field (or read-only Edit field) on the current screen with the Regular Expression. The Regular Expression can be broken down as follows…

- ^ position at start of the string
- 1st group (\s*\d*\.\d{2}\s*)
  - ○ \s* will match any white space character [\r\n\t\f] between zero and unlimited times
  - ○ \d* match a digit [0-9] between zero and unlimited times
  - ○ \. matches the full stop character literally
  - ○ \d{2} match a digit [0-9] exactly 2 times
  - ○ \s* will match any white space character [\r\n\t\f] between zero and unlimited times
- $ position at end of the string

This Regular Expression will match any Output field value that contains a positive numeric value with two decimal places, such as "1234.56", "1234.56   " or "   12345.00" but it will not match "1234", "1234.56-" or any Output field that contains text.

Click *Apply* to accept this Test.

We now need to add some Actions. Click the *Add Action* option from the Actions grid toolbar and from the *Action* field, select the *Apply a Field Format* option, from the *Field* field, select the *Any Matching Output Field* option and then use the prompt icon to the right of the *Value* field to select a Field Format of *Currency*; E.g.

Edit Action

Action

Apply a Field Format ▼

Field

Any matching Output Field ▼

Value

Currency (e.g. 1234.67 becomes £1,234.67)   ✎

Cancel   **Apply**

Click *Apply* to accept this Action.

Create two more Actions with the following options set…

Edit Action

Action

Set Field Alignment ▼

Field

Any matching Output Field ▼

Value

Right Align   ✎

Cancel   **Apply**

Edit Action

Action

Set Field Colour ▼

Field

Any matching Output Field ▼

Value

Blue 🖉

Cancel | **Apply**

Click *Apply* to accept each of the Actions. The complete Rule should look like this…

Edit Rule

Tests   + 🖉 🗑

Field	Condition	Value
Any Output Field	matches Regular Expression	^(\s*\d*\.\d{2}\s*)$

Actions   + 🖉 🗑

Action	Field	Value
Apply a Field Format	any matching Output Field	Currency (e.g. 1234.67 becomes £1,234.67)
Set Field Alignment	any matching Output Field	Right Align
Set Field Colour	any matching Output Field	Blue

Cancel | **Apply**

Click *Apply* to save the Rule.

Create a new Rule. Add a new Test to this Rule. In the *Field* field, select the *Any Output Field* option. In the *Condition* field, select the *Matches Regular Expression* option and in the Value field, enter `^(\s*\d*\.\d{2}-\s*)$`, e.g.

Edit Test

Field

Any Output Field ▼

Condition

Matches Regular Expression ▼

Value

^(\s*\d*\.\d{2}-\s*)$ ✎

Cancel   **Apply**

This Test will compare every Output field (or read-only Edit field) on the current screen with the Regular Expression. The Regular Expression can be broken down as follows…

- ^ position at start of the string
- 1st group (\s*\d*\.\d{2}-)
    - \s* will match any white space character [\r\n\t\f] between zero and unlimited times
    - \d* match a digit [0-9] between zero and unlimited times
    - \. matches the full stop character literally
    - \d{2} match a digit [0-9] exactly 2 times
    - – matches the minus character literally
    - \s* will match any white space character [\r\n\t\f] between zero and unlimited times
- $ position at end of the string

This Regular Expression will match any Output field value that contains a negative numeric value with two decimal places, such as "1234.56-", "1234.56-   " or "   12345.00-" but it will not match "1234", "1234.56" or any Output field that contains text.

Click *Apply* to accept this Test.

We now need to add some Actions. Click the *Add Action* icon from the *Actions* grid toolbar and from the *Action* field, select the *Apply a Field Format* option, from the *Field* field, select the *Any Matching Output Field* option and then use the prompt button to the right of the *Value* field to select a Field Format of *Currency*; E.g.

Click *Apply* to accept this Action.

Create two more Actions with the following options set…

Edit Action

Action

Set Field Colour ▾

Field

Any matching Output Field ▾

Value

Red

| Cancel | Apply |

Click *Apply* to accept each of the Actions. The complete Rule should look like this…

Edit Rule

Tests   + ✎ 🗑

Field	Condition	Value
Any Output Field	matches Regular Expression	^(\s*\d*\.\d{2}-\s*)$

When any Output Field matches Regular Expression ^(\s*\d*\.\d{2}-\s*)$.

Actions   + ✎ 🗑

Action	Field	Value
Apply a Field Format	any matching Output Field	Currency (e.g. 1234.67 becomes £1,234.67)
Set Field Alignment	any matching Output Field	Right Align
Set Field Colour	any matching Output Field	Red

Apply field format Currency (e.g. 1234.67 becomes £1,234.67) to any matching Output Field.

| Cancel | Apply |

Click *Apply* to create the Rule.

Define Rules

Rules + ✏ 🗑 📋

When any Output Field matches Regular Expression ^(\s*\d*\.\d{2}\s*)$ then apply field format Currency (e.g. 1234.67 becomes £1,234.

When any Output Field matches Regular Expression ^(\s*\d*\.\d{2}-\s*)$ then apply field format Currency (e.g. 1234.67 becomes £1,234

When any Output Field matches Regular Expression ^(\s*\d*\.\d{2}-\s*)$ then apply field format Currency (e.g. 1234.67 becomes £1,234.67) to any matching Output Field, Right Align any matching Output Field, change the colour of any matching Output Field to 'Red'.

Cancel Apply

Click *Apply* to save the Screen Rule.

Save your design, exit Designer and you should now see that any positive numeric values with two decimal places are formatted as currency (with appropriate currency symbol from your locale and thousand separators), right-aligned and coloured blue; any negative numeric values with two decimal places are formatted as currency (with appropriate currency symbol from your locale and thousand separators), right-aligned and coloured red; all other numeric values and text are left unaltered, e.g.

☰	System i Home		Credit manager enquiry

✎ Actions ▼   💼 ▼   ⚙   ?

SL242   Z1 - UK Demo Company   User   RSANK3   15/04/21
                                                                                                     15:28:00

Credit Manager Enquiry

Account . . . . ?	GC01	AR Items . . . . . . :		£78,704,960.70
Reeve's Chemist A		Orders alloc.or desp.+		£1,428,448.85
Debtor days . . . . :	2114	Collection documents +		£7,391.74
Days sales outstanding . . . :		Total outstanding . =		£80,140,801.29
Average days to pay . . . . :	110	Credit limit . . . . :		£920,000,000,000.
Average days slow . . . . . :	80	Available credit . . :		£919,919,859,198.
Overdue days . . . . :	2168	Performance	Z Performance Indicator Z	

[ ]? OS balance :	£78,712,352.44	YTD Net sales . . . :		£4,739,586.24
[ ]0 Not yet due :	£79,778,529.15	YTD Net credits . . :		-£110,880.10
[ ]1 1 - 30 :	-£100.00	YTD Cash . . . . . . :		-£41,700.00
[ ]2 31 - 60 :	£337.40	YTD Discount . . . . :		£0.00
[ ]3 61 - 90 :	£1,535.40	Highest O/S :	2/02/11	£93,414.08
[ ]4 91 - 120 :	£3,934.02	Last payment:	19/08/20	-£1,000.00
[ ]5 121 - 150 :	£1,188.49	Last sale . :	4/09/20	£407.58
[ ]6 151 + :	-£1,073,072.02	Statement . :	29/03/17	-£308,987.74
Overdue balance :	-£1,066,176.71	Interest . :		
Doubtful balance :	£0.00	Dunning :	0/00/00	£0.00

Exit	Prompt	Contras		1stCont	Diary
Open items	All items	Pay history		Transaction	More keys

You can change to other customer accounts to see how the changes are applied dynamically depending on the incoming data, e.g.
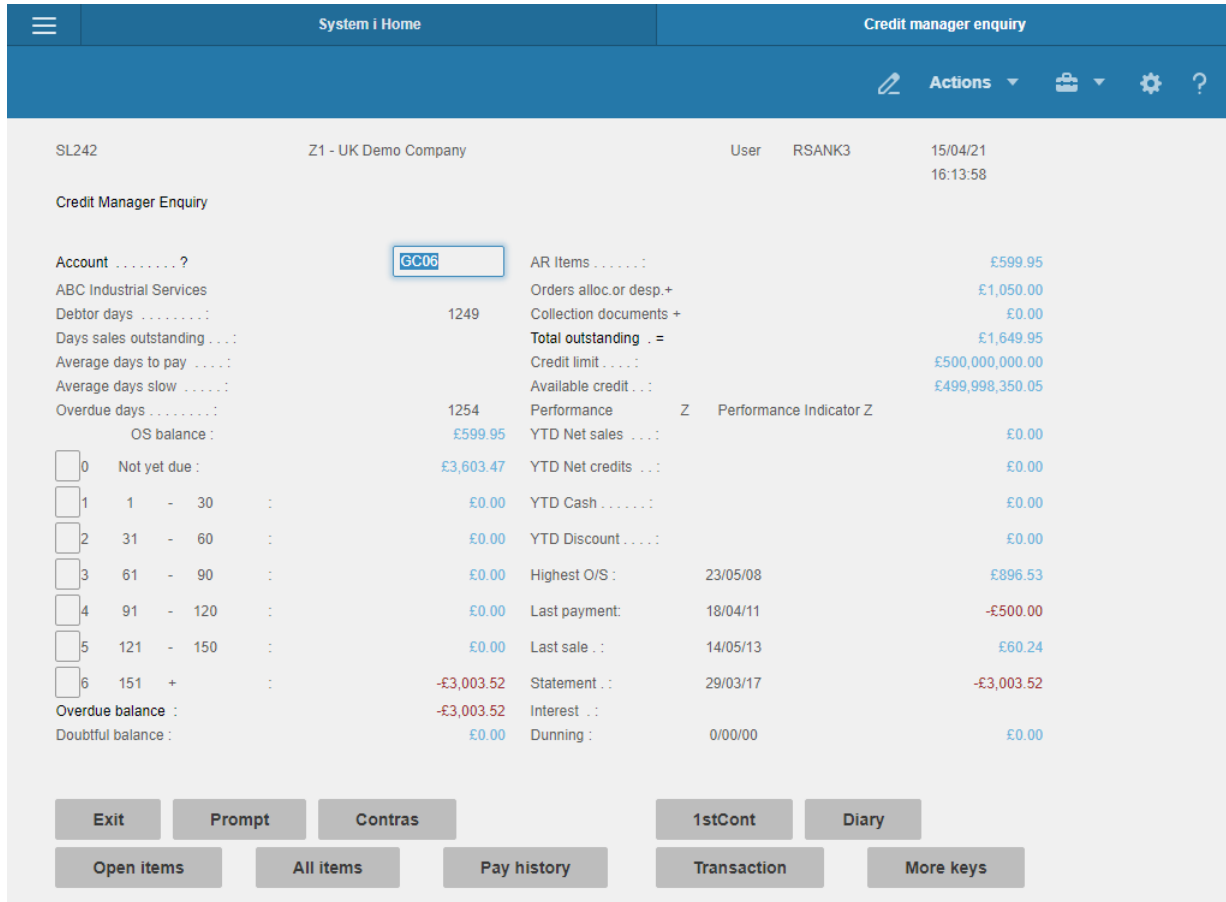
Applying a Hyperlink Definition to Multiple Labels

For this example, we will be using the **Whole Order Enquiry** application (1/OEE) as this is a program that many Infor ERP System21 3.1 customers use.

Run the application and enter a valid order number within the first screen (preferably one that has lots of item lines) and press *Enter* to take you through to the order details screen. Press **F10** to show item/stockroom numbers, e.g.

We will now create a new Hyperlink Definition for the Infor ERP System21 3.1 **All Stockrooms For An Item** application task (**5/INE**). Enter Designer. Select the *Global -> Define Hyperlink Definitions* menu option.

Add a new Hyperlink Definition and select the *Task Hyperlink* type. In the *Task Hyperlink Properties* dialog, set the *Name* field to a suitable description (e.g. All Stockrooms Enquiry Hyperlink) and set the *Task Shortcut* field to **5/INE,** e.g.

Task Hyperlink Properties

Name:

All Stockrooms Enquiry Hyperlink

Task Shortcut or System i Command:

5/INE

☐ Show Task in Popup Window

Overrides   + 🖵 ✎ 🗑

Screen	Target	Value

No Data Available

Cancel	Select

Caution: The *Name* field will be used as the default Infor System I Workspace AnyWhere Module Tab Heading for the new task launched by this Hyperlink.

Select the *Add Designer Variable or Hyperlink Label* option from the *Overrides* grid toolbar. The *Override Properties* dialog is displayed.

Enter **0** into the *Target Input Field Index* field (which will populate the first Edit Field within the display) then select the **Hyperlink Label** option from the *Override Value* dropdown list field, e.g.

Override Properties

Screen ID:

```

```

Target Input Field Index:

```
0
```

Override Value:

```
Hyperlink Label                                    ▼
```

☐ Only use a Sub-section of this Override Value

Start Position: Sub-section Length:

| − | 1 | + | | − | 1 | + |

| Cancel | Change |

Click *Change*.

Select the *Add Fixed Value* option from the *Overrides* grid toolbar. The *Override Properties* dialog is displayed.

Enter **F** into the *Target Input Field Index* field (which will automatically trigger a function key) then enter **0** into the *Override Value* field (to correspond with pressing the Enter key), e.g.

Override Properties

Screen ID:

Target Input Field Index:

F

Override Value:

0

Cancel   Change

Click *Change*.

Select the *Add Fixed Value* option from the *Overrides* grid toolbar. The *Override Properties* dialog is displayed.

Enter **H** into the *Target Input Field Index* field (which will automatically hide the initial task screen) then enter 1 into the *Override Value* field, e.g.

Override Properties

Screen ID:

Target Input Field Index:

H

Override Value:

1

Cancel   Change

Click *Change*.

Your *Task Hyperlink Properties* dialog should now look like this…

Task Hyperlink Properties

Name:

All Stockrooms Enquiry Hyperlink

Task Shortcut or System i Command:

5/INE

☐ Show Task in Popup Window

Overrides   + ▢ ✎ 🗑

Screen	Target	Value
	0	Hyperlink Label
	F	0
	H	1

Cancel	Select

Click *Select*.

Hyperlink Definitions

Hyperlinks   + ✎ 🗑 🗋

All Stockrooms Enquiry Hyperlink

Hyperlink "All Stockrooms Enquiry Hyperlink" (Type - task).

Cancel	Apply

Click *Apply* to commit the Hyperlink Definition.

We can now apply this to the 1/OEE Screen Design. Still in Designer, select all the Items within the table, e.g.

Select *Fields -> Edit Hyperlink Definition* menu option.

In the *Select Hyperlink Definition* dialog, select the Hyperlink Definition you just created, e.g.

Click *Select.*

The Hyperlink Definition will be applied to all the selected fields (light-blue styling applied); E.g.

☰	**System i Home**			**Whole order**

File ▼   Fields ▼   Buttons ▼   Tables ▼   Screen ▼   Global ▼   Tools ▼   Help ▼

OE205   Z1 - UK Demo Company   USER   RSANK3   16/04/21
                                                                                          10:13:23

Whole Order Enquiry

Order..   `0000100`   Customer....   `GC06`   `000`   Order ref..   `2184565`

Order date...........   14/09/94   Delivery   ABC Industrial Services
System order date....   14/09/94   address   55 St.Andrews Cross
Despatch required....   15/09/94   Plymouth
Order value..   .00   <script>alert(1);</script>

Priced at...........   DESPATCH   PL1 2DS

Ln.	Dn	Despatch Qty	SR	Item Number	UoM	Order Qty.	Despatch	S	Inv No	Typ
1		200.000	03	5001	BX	200.000	15/09/94			
2		200.000	03	5006	BX	200.000	15/09/94			
3		376.000	03	5007	BX	400.000	15/09/94	A		
4		499.000	03	5019	BX	500.000	15/09/94	A		
5		52.000	03	5022	BT	200.000	15/09/94	A		
6		200.000	03	5025	EA	200.000	15/09/94			
7		200.000	03	5032	BX	200.000	15/09/94			
8		122.000	03	5033	BX	200.000	15/09/94	A		+

1=Select 2=Batch allocs 3=Reservations 4=Supply order enq 5=Pricing details

Exit	Item Description	Change Units	Previous
Further Details	Text	More Options	

Select *File -> Save*, then *File -> Exit* to leave Designer

At runtime, clicking on any of the Hyperlinks will open the **5/INE** ERP task and navigate directly to the correct data; E.g. clicking on **5006** opens a new tab, runs **5/INE**, enters the item into the first screen of the application, and presses **Enter** to display the relevant stockroom information; E.g.

☰	System i Home	Whole order	All Stockrooms Enquiry Hyperlink

✎ Actions ▼ 🧰 ▼ ⚙ ?

IN004   Z1 - UK Demo Company   USER   RSANK3   16/04/21
                                                                              10:20:47

All Stockrooms For An Item Enquiry

Item.................   5006   Organic Hair Tonic 18x215ml

Stockroom/	Frozen/	On order/	Physical/
units	allocated	In transit	Available
Finished Goods	.000	29.000	13.000
Boxes of	13.000	.000	.000
Inbound consignment	23.500	.000	23.500
Boxes of	.000	.000	.000
General Location Control	.000	.000	186.000
Boxes of	.000	.000	186.000
Laura inbound consignment	.000	.000	2.000
Boxes of	.000	.000	2.000
Central Warehouse	5.000	.000	1038.000
Boxes of	11.000	.000	1022.000
Stockroom 01	12.000	7.000	782.000
Boxes of	43.000	5.000	727.000
			More...

1=Select 2=Locations 6=Stock Availability

Exit	Previous

Appendix A Deprecated Features

The following features from the previous version of Designer within the System i Emulator are either no longer available within Designer for the 5250 AnyWhere Emulator, or are not supported by the 5250 AnyWhere Emulator at run-time…

- Set Font Size (via *Screen -> Override Font Setting* option or Screen/Global Rule *Set Font Size* action). Font size is controlled by the user using their web-browser zoom settings, so they have full control for their own accessibility setup
- Calls to any client-side Program (via Button or Hyperlink) is not possible due to browser security restrictions (includes Program buttons added via Screen or Global Rules). Any Program buttons/hyperlinks added using the previous version of Designer will not be visible or accessible in the 5250 AnyWhere Emulator Designer
- Prompt Buttons are not implemented. Use Prompt Fields, which is the preferred choice for both Infor System I Workspace AnyWhere Emulator options. Any Prompt buttons added using the previous version of Designer will not be visible or accessible in the 5250 AnyWhere Emulator Designer
- Global Rule action to change Background/Input Field/Green Text/Red Highlight Colors are no longer supported
- Global Rule action to set Windows Keyboard ID is no longer supported
- Global Rule action to set Translation Table is no longer supported
- Global Rule action to set Table Border Width is no longer supported
- Function key labels on Popups cannot be hidden
- Within the Table Wizard dialog, the Table Display Properties to Fill Table Row background, Fill Table Header background and, Show Grid Lines on/off are all no longer relevant and have been removed
- Designer Variable initial values for IPV4 and IPV6 client addresses are not supported
- Global Widget's *Icon* field is ignored at runtime (as there is no icon in Infor Design System widget headers). The field to set this against a Widget has been removed within Designer
- Infor Design System Table Export feature does not support Microsoft Excel column definitions for Text, Numeric or Date. Excel's auto-recognition of cell values is used instead. These definitions are used by the Designer Table to determine the default column alignment (data within Date and Numeric columns will automatically be right aligned, data within Text columns will be automatically left aligned)
- Edit fields with Prompt or Date controls applied do not support alignment overrides
- At run-time, the 5250 AnyWhere Emulator does not display a dotted line beneath Label fields that have a Tooltip applied

- Edit fields that have been set as a Dropdown List in Designer do not support the *Allow User To Type Into Dropdown Field* option within the *Edit Dropdown Options* dialog. At run-time, Dropdown Lists only allow the user to select from the provided list options. The ability to define a Dropdown List as editable has been removed from Designer

- Some Field Attributes are ignored/different when applied to a field that is also a Hyperlink, to preserve the Hyperlink UI standard defined by the Infor Design System. These attributes include Underline (as the Hyperlink is always underlined), Colours (unless Reverse option is also used), Read-Only Input/Read-Only Numeric Input (where only the right-alignment change is applied), Column Header/Table Body Monospaced (where only the monospaced font is applied) and Column Header

- Date input/output formats can only be selected from pre-defined lists and may no longer be entered manually. A date format entered manually in a previous version of Designer may still be applied at run-time, but may no longer be available if the date format properties are opened within Designer