



**SOP Quote, Order, Invoice with multiple subtotals  
For international shipping**



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**INVOICE**

SOLD TO: [REDACTED]

SHIP TO: [REDACTED]

ORDEN # 640

TEGUCIGALPA, HONDURAS

AGENT: [REDACTED]

INVOICE No. 06/060.9842

DESTINATION HONDURAS

ITEM	QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL PRICE
1	4	[REDACTED]	\$ 285.80	\$ 1,143.20
2	4	[REDACTED]	\$ 27.83	\$ 111.32

TOTAL F.O.B. FABRICA \$ 1,254.52  
 FLETE INTERNO HASTA MIAMI, FL \$ 160.00  
 TOTAL F.A.S. MIAMI, FL \$ 1,414.52  
 GASTOS DE DESPACHO Y DOCUMENTACION \$ 100.00  
 ACARREO AL PUERTO DE MIAMI, FL \$ 40.00  
 REEMPAQUE Y MANEJO \$ 30.00  
 TOTAL F.O.B. MIAMI, FL \$ 1,584.52  
 SEGURO \$ 25.00  
 FLETE MARITIMO HASTA TEGUCIGALPA, HONDURAS \$ 175.00  
**TOTAL C.I.F. TEGUCIGALPA, HONDURAS \$ 1,784.52**

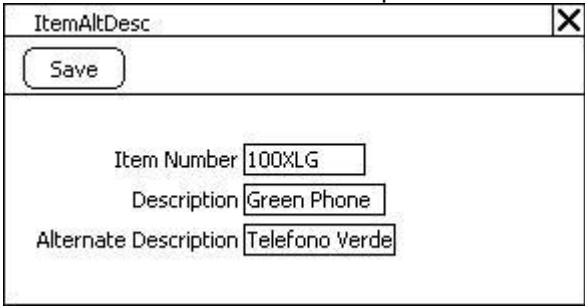
CHANGE REQUEST 1 .....11

## Problem Definition

Document – Problem Definition	CCDA
<p>ACMECO is an exporter. They need to have a specific format to Quotes, Orders and Invoices to capture insurance and freight/shipping related costs. These details should appear in an extended “subtotals” sections on the sales documents.</p> <p>ACMECO needs to list the item(s) being sold, then display one or more lines related to shipping (freight, insurance, duties, etc), then display a subtotal, then have additional lines of added processing costs, and another subtotal, and so on. While there are often no more than two or three such sections, there could be many.</p> <p>ACMECO have Spanish and English speaking customers. A secondary requirement is to support printing documents in Spanish or English. A Spanish speaking customer should always get documents in Spanish.</p>	

## Design Features

<b><i>Customer Language Preference</i></b>	<b>CCDA</b>
<p>The Customer Maintenance Options window has a Language field, but there are no options in the drop down. We will add English and Spanish to the drop down.</p> <p>ACMECO will use this field to indicate whether a customer's documents should be printed using the English or Spanish report form.</p>	

<b><i>Item Alternate Description</i></b>	<b>CCDA</b>
<p>ACMECO need to be able to record a complete description for each inventory item in English or Spanish.</p> <p>We will add a new window, Item Alternate Description, that will be acceseds via an Extras menu option when the Item Maintenance window is open.</p> <div data-bbox="436 542 1016 846" data-label="Form">  </div> <p>The window will display information for the currently selected item, and allow entering/editing an Alternate Description.</p>	

<b>SOP Freight Reports</b>	<b>CCDA</b>
<p>The objective is to produce SOP reports that contain the amount of detail shown on the Sample Invoice (See Appendix). The sample shows two lines of product, followed by a couple of lines of spaces, then several shipping details and subtotals.</p> <p>The key part of this report is the Subtotals section. This section breaks down into two conceptual elements:</p> <ul style="list-style-type: none"> <li>- "Detail" line(s)</li> <li>- "Subtotal" line(s)</li> </ul> <p>The section needs to record additional costs related to shipping, insurance, documentation, etc.</p> <p>ACMECO are currently using a process where Service Items in GP are used to add these lines to the report. A custom report (which has never worked correctly) is assumed to be attempting to group the "service" items into sections in the Subtotals.</p> <p>Using Service Items on the sales document to record this information is a sound approach, and we will continue this method.</p> <p>We will create custom versions of a Quote, Order and Invoice report. The reports will have Alternate Language duplicates for the Spanish reports. ACMECO will provide Spanish translations for report fields such as "Sold To", "Item", "Quantity", "Unit Price" and so on.</p> <p>The custom reports will print via an Extras menu option from the Sales Transaction Entry window. This design does not provide for printing a batch of documents, such as during a Batch Transfer of Orders to Invoices or such as on the Print Sales Documents window. It is assumed that ACMECO will print needed reports one at a time from the Sales Transaction Entry window.</p> <p>To print the custom report the software will:</p> <ul style="list-style-type: none"> <li>- Read the lines on the sales order. Non-freight lines will become the details on the report (what are typically the sales line items)</li> <li>- Freight Lines will essentially be treated as Instructions for the reporting engine. A</li> </ul>	

Detail type item will print only with its price. If it's followed by a Subtotal type item, that line will total all items above it (include SOP Lines and any Freight Details that preceded the Subtotal line). In this way ACMECO can add as many freight details as necessary.

Depending on the Customer's language preference the report engine will:

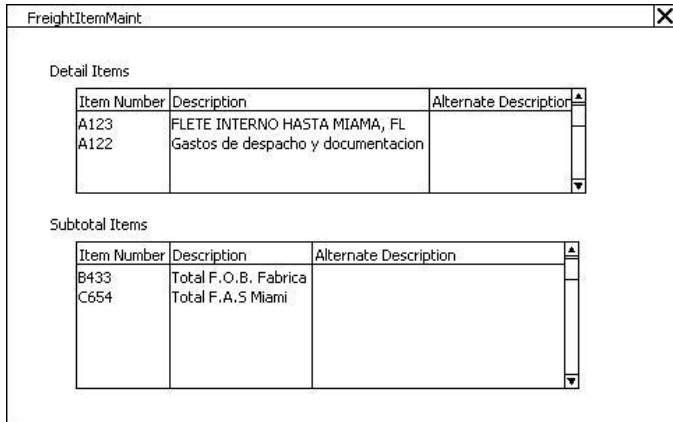
- Select either the English or Spanish report form
- Use either the primary Item Description (English) or Alternate Item Description (Spanish).

Correct functioning of the report will depend on all Freight Items following regular inventory items on the Sales Transactions.

The report will print only in the functional currency.

It is assumed that the Quote, Order, and Invoice are essentially identical reports, so that we can create one report and make copies to produce the other reports (with minor modifications). The Sample Order in the Appendix will be used as the template.



<b>Freight Item Maintenance</b>	<b>CCDA</b>
<p>The current method of entering Item Numbers on the Sales Transaction to provide the Subtotal Freight details is functional, but relies on “magic” code to interpret the lines (the current custom code is hard-coded to interpret certain item numbers). To make the definition of Freight Items more explicit, and user-definable, we will add a window called Freight Item Maintenance.</p> <p>Freight Item Maintenance will be access from Cards &gt;&gt; Inventory &gt;&gt; Freight Item Maintenance.</p> <div data-bbox="394 662 1062 1081" data-label="Image">  <p>The screenshot shows a window titled 'FreightItemMaint' with a close button. It contains two tables. The first table, 'Detail Items', has columns 'Item Number', 'Description', and 'Alternate Description'. It lists two items: A123 with description 'FLETE INTERNO HASTA MIAMA, FL' and A122 with description 'Gastos de despacho y documentacion'. The second table, 'Subtotal Items', also has columns 'Item Number', 'Description', and 'Alternate Description'. It lists two items: B433 with description 'Total F.O.B. Fabrica' and C654 with description 'Total F.A.S Miami'.</p> </div> <p>As described in the SOP Reports section, the subtotal details break down into two general groupings: Details and Subtotals. All of these must be set up as Service Items in Dynamics GP. When entered on a Sales Transaction the Detail type items will also have a Cost.</p> <p>The window above will be used to tell the system which Item Numbers are Details (for which the cost on the SOP line will be brought down to the subtotal), or a Subtotal line.</p>	

# Appendix

**INVOICE**

SOLD TO: [REDACTED]

SHIP TO: [REDACTED]

ORDEN # 640

TEGUCIGALPA, HONDURAS

AGENT [REDACTED]

INVOICE No. [REDACTED]

06/360-9842

DESTINATION HONDURAS

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TOTAL F.O.B. MIAMI, FL \$ 1,584.52

SEGURO \$ 25.00

FLETE MARITIMO HASTA TEGUCIGALPA, HONDURAS \$ 175.00

**TOTAL C.I.F. TEGUCIGALPA, HONDURAS \$ 1,764.52**

<b>CHANGE REQUEST 1</b>			
<b>Client Name</b>		<b>Date</b>	
<b>Project Name</b>		<b>Version</b>	
<b>Change Request #</b>			
<b>Description of Change</b>			
<p>ACMECO will be implementing Dynamics GP in another company (ACMECO2)</p> <p>Currently the ACMECO custom sales reporting modification has the following custom reports:</p> <ul style="list-style-type: none"> <li>• Quote in English &amp; Spanish</li> <li>• Order in English &amp; Spanish</li> <li>• Invoice in English &amp; Spanish</li> </ul> <p>Each report has the ACMECO logo. Since GP reports are system reports (i.e. the same Invoice is used by all GP company databases), one approach to making the same modification available to ACMECO2 would be to create copies of the 6 reports listed above, and then modify them for use by ACMECO2.</p> <p>All of the reports are very similar in physical layout, with just some minor label changes between Quotes, Orders, and Invoices. If a report change is required, such as to add long in-line notes (which was done recently), the same change needs to be duplicated 6 times. This adds to the cost of each change. Creating a duplicate set of reports for ACMECO2 magnifies the impact by 2x, so any “report functionality” change would need to be propagated to 12 reports.</p> <p>We do not think this is a good long-term approach. Even with two companies, having to propagate a change to 12 reports will be very time consuming. To consider a design that might support future changes, we must also think about the possibility that ACMECO adds another company at some point. This approach of duplicating reports quickly becomes unmanageable.</p> <p>To provide ACMECO2 with the functionality they need, while improving manageability and future</p>			

expandability of the modification, the following design is being proposed.

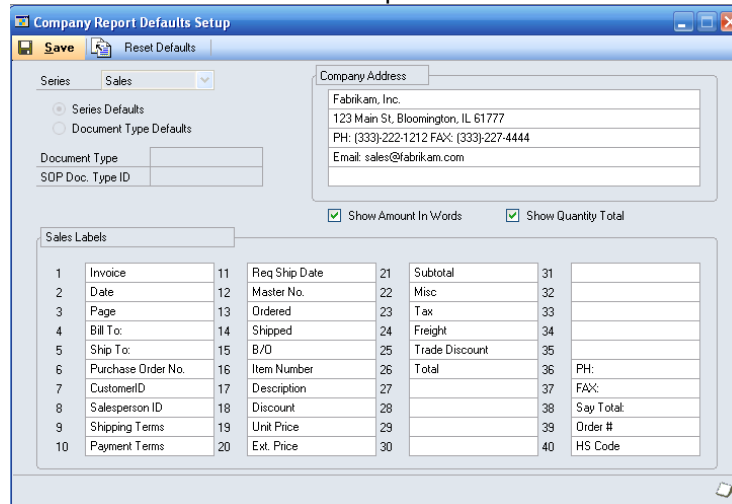
The overview of the proposed solution is as follows:

- Reduce the number of reports from 6 to 2 (one for each company)
- SOP Report 1 will be for ACMECO, and SOP Report 2 will be for ACMECO2
- Remove all “hard-coded” text labels, such as “Invoice”, “Destino”, “Vendido A”, etc, from the reports
- Replace the labels with User-defined fields stored in the database
- Create a Setup window where the user can set the string-data in each field (i.e. store “Destino” in the database). The Setup will be pre-populated with default values based on the current reports.
- Allow defining labels for each combination of SOP Type (Quote, Order, Invoice) and Language Code (as defined in GP System Language Setup).

When a user prints a sales document the following will occur:

- The system will detect the company database and select the correct report
- Then the “labels” for the report will be filled-in based on the SOP Type of the sales document (Quote, Order, Invoice), and the Customer’s Language preference. The default will be Spanish if none is specified.

The Report Setup window will be similar to this mock-up.



There are several report fields needed by ACMECO2 that are not currently on the GP Invoice. The fields are listed below, and where the data will be stored in GP.

Sales Header:

- Sold To and Bill To are the same—the GP Customer's Bill To information.
- FOB – from the Pickup/Delivery setting on the Shipping Method
- Earliest Ship Date – SOP User Defined Date #1
- Must Ship Date – SOP User Defined Date #2
- Ship Region – Territory ID (Sales Customer Detail Entry window)
- Ship Area – UPS Zone
- Entered By – “User 2 Enter” – stored on Sales Document by not displayed on the window
- Inside Sales – First Name + Last Name from Salesperson Maintenance, retrieved using Salesperson ID on the sales transaction

[NOTE: The sample invoice provided by ACMECO2 has been removed to protect confidential customer information]