

DS0602

Historical Inventory Valuation and Historical Lot Numbers Reports



Table of Contents

Table of Contents	2
Problem Definition	
Problem Definition	
Solution Overview	
Solution Overview	
Design Features	
Historical Inventory Reports	<u>5</u>
Calculations	
Sample Reports	9



Problem Definition

Problem Definition	CCDA
ACME Co.'s activities include fishing, trading, processing and marketing with offices and operations in strategic locations around the world. Their customer base includes famous brands, tuna processing plants and fishing companies.	
They currently utilize Dynamics GP with a custom Bill of Materials Module. Within the custom BOM module is an Inventory Valuation Report that provides the Item Number, Site ID, Quantity on Hand, U of M, Unit Cost and Extended Cost. They would like to be able run this report historically with the addition of an "As of Date". The "As of Date" should pull both the Quantity on Hand and the Standard Cost as of the date entered. The standard Dynamics GP Historical Stock Status report is not visually pleasing nor do they feel that it provides them with accurate information.	
In addition, ACME would like to run the standard Dynamics GP Inventory Lot Number Report in the same fashion including an "As of Date" for historical capabilities.	



Solution Overview

Solution Overview	CCDA
Two new reports will be created within Dynamics GP:	
 Historical Inventory Valuation Report Historical Lot Number Report 	
The details of these reports can be found below in the section marked Design Features.	



Design Features

Historical Inventory Reports	CCDA
Navigation>>Reports>>Inventory>>Historical Inventory Reports	
This window will be used to enter restriction criteria and print the report.	
Historical Inventory Reports Print Done	
Report Selection: Historical Inventory Valuation Report ▼ As Of Date: 12/31/2012	
Item Number From: 123456 Item Number To: 456789	
Site From: Warehouse Site To: Warehouse	
Sort By: Item Number ▼	
= Lookup Button	
Field Function	
Report Selection The user will choose between two reports: Historical Inventory Valuation Report Historical Lot Number Report	
As of Date The user will enter the "As of Date". The report will pull through both Quantity	



	On Hand and Standard Cost based on the "As of Date." This is a required field and will default to the current user date.
Item Number From	The user will enter an Item Number or select it from the lookup to start the Item Number range.
Item Number To	The user will enter an Item Number or select it from the lookup to end the Item Number range.
Site From	The user will enter a Site or select it from the lookup to start the Site range.
Site To	The user will enter a Site or select it from the lookup to end the Site range.
Sort By	The user will select to sort the report by Item Number or Site ID. This selection only changes the Sort Order of the Historical Inventory Valuation Report.
Print Button	The user will select the PRINT button to print the selected report.
Done Button	The user will select the DONE button to exit the window.

The user does not need to enter an Item Number or Site Range. Selecting the PRINT button with these fields blank will print the report for all Item Numbers in all Sites. Item Numbers with ZERO on hand quantity will NOT print. Items with positive and/or negative quantities will print.

When the PRINT button is selected, the user will be prompted to either print the report to:

- Screen
- Printer
- File

Each report will look comparable to the sample reports provided during discovery and attached to this design specification. The report fields are listed below:

Historical Inventory Valuation Report

- Date
- Item Number
- Item Description
- Site
- Quantity On Hand
- Unit of Measure
- Standard Cost

Historical Lot Number Report

Date



- Item Number
- Item Description
- Site
- Lot Number
- Date Received*
- Quantity On Hand
- Days Aged*
- Standard Cost

In addition to the fields listed above, each report line will include the Extended Cost (Standard Cost x Quantity On Hand). The Total Inventory Value will be printed at the bottom of the last page.

PLEASE NOTE:

- The column Date Received will display the most recent Date Received prior to the As of Date as there is the potential within Dynamics GP for multiple Receipt Dates per Lot Number.
- The column Days Aged will equal the (As of Date Date Received).



Calculations

There is no user interface for this part of the enhancement. SQL queries and/or DEX calculation routines will be utilized to determine reporting quantities and costs. The basis for the calculations will be the "As of Date" entered in the Historical Inventory Reports window. The enhancement will begin with the current On Hand Quantities for all Items/Sites selected in the range. The enhancement calculation code will then "reverse" all Inventory Transactions which have a **Document Date** after the "As of Date" entered.

Backdated transactions MUST have their *Document Date* backdated prior to posting. It is the *Document Date* that will determine whether a transaction should be included or excluded from the on-hand calculation.

Once the enhancement has determined the accurate on-hand quantities based on the "As of Date," it will determine the appropriate Historical Standard Cost per Item. The Historical Standard Cost will also be based on the "As of Date." All historical on-hand quantities of an Item will be valued at the same Standard Cost. For example:

On hand balance of item 123 as of 12/31/2012 is zero.

100 pieces of item 123 received on 01/01/2013 @ standard cost \$1.00

101 pieces of item 123 received on 01/15/2013 @ standard cost \$2.00

99 piece of item 123 received on 1/20/2013 @ standard cost \$1.25

No quantities have been "sold" or "used".

If the Historical Inventory Valuation Report is run with an As of Date of:

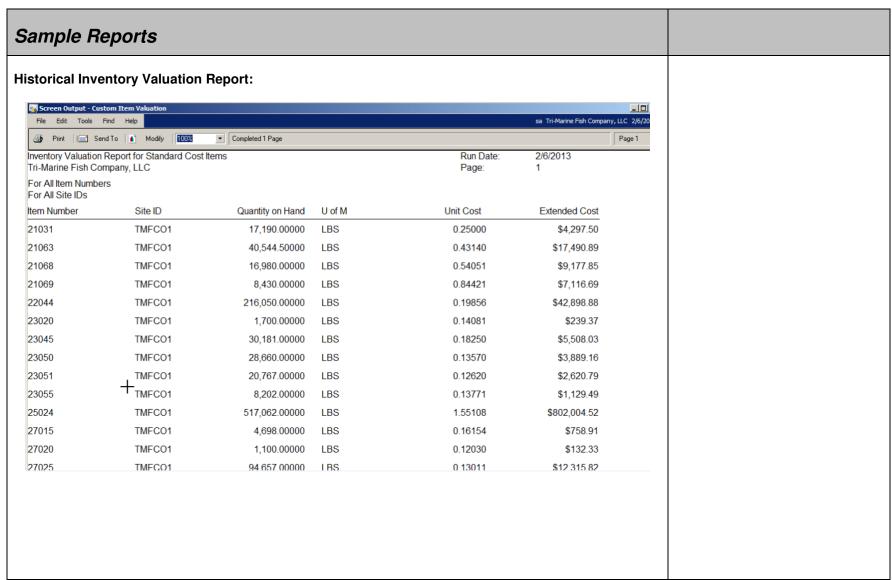
- 01/31/2013 300 pieces on hand @ 1.25 per unit = \$375.00 total
- 01/16/2013 201 pieces on hand @ 2.00 per unit = \$402.00 total
- 01/01/2013 100 pieces on hand @ 1.00 per unit = \$100.00 total

CCDA

Two options were discussed during the discovery phase of the project for reporting. The first option is the option that has been selected and defined in the enhancement. This option creates the historical Inventory reports from scratch. This allows users to report on any day in the past. This option is far more complex (and therefore more costly) as the enhancement needs to unwind all transactions that had affected inventory to determine accurate on-hand quantities. It was determined that the benefits of this option outweigh the cost. Consequently, it was selected.

This second option provided historical Inventory reports through snapshots of the database. The level of complexity would be reduced as reports would be created directly from the snapshots. Reporting would only be possible from days where snapshots had been taken. Transactions posted after the "As of Date" but backdated would not have been included in the Historical Inventory Reports. It was determined that this requirement was a "must have" and therefore this option was not selected.







Item Number		Descript	ion				
Site Qu	antity T	уре					
Lot Number	:	Bin	Date Received	Quantity Received	Quantity Available	Days Aged	Actual Cost
 CAP100		Capacito					
WAREHOUSE On	n Hand						
LOT A		AUTOCREATE	6/15/2015	10	0	667	\$0.02
5464		A1	4/12/2017	12	1	0	\$0.02
54654		A1	4/12/2017	10	2	0	\$0.02
5464		AUTOCREATE	4/12/2017	10	8	0	\$0.02
87987		A1	4/12/2017	50	50	0	\$0.02
1231		A1	4/12/2017	50	19	0	\$0.02
654654		AUTOCREATE	4/12/2017	100	100	0	\$0.02
CAP200		Capacito	r				
MAIN On	n Hand						
321654		AUTOCREATE	4/12/2017	5	5	0	\$1.02
54321		AUTOCREATE	4/12/2017	1	1	0	\$1.02
898797		AUTOCREATE	4/12/2017	10	10	0	\$1.02
WAREHOUSE On	n Hand						
FRX3		AUTOCREATE	1/28/2013	1	0	1,535	\$13.44
FRX4		AUTOCREATE	1/28/2013	1	0	1,535	\$13.44
FRX6		AUTOCREATE	1/28/2013	1	0	1,535	\$13.44
NEWEST EXP	?	AUTOCREATE	4/12/2017	10	0	0	\$0.02
OLDEST		AUTOCREATE	4/12/2017	5	0	0	\$0.02
464564		AUTOCREATE	4/12/2017	2	0	0	\$0.02