

# Service Management For MAS 90/200

457 Palm Drive Glendale, CA 91202 818-956-3744 818-956-3746 sales@iigservices.com

software

Master Developer

www.iigservices.com

Information in this document is subject to change without notice. No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose without the express written consent of Information Integration Group. Inc.

#### **TRADEMARKS**

*MS-DOS* and *Windows* are trademarks of Microsoft Corporation.

MAS 90, MAS 90CS, MAS 90W and MAS 200 are registered trademarks of Sage Software, Inc.

All other product names and brand names are service marks, and/or trademarks or registered trademarks of their respective companies.

## **Table of Contents**

Installation Instructions and Cautions	
Wait! Before You Install – Do You Use CUSTOM OFFICE?	5
Registering IIG products	6
Installing Service Management	7
Enhancement Installation	8
Important Notes	10
Reservation - New Dispatch Status	
Setup Activities	11
Service management Options	11
Main Tab	11
Labor/Item Tab	
Additional Tab	25
B/M Options Tab	
Other Tab	35
Job Code Maintenance	37
Skill Code Maintenance	38
Labor Code Maintenance	40
Territory Code Maintenance	43
Technician Code Maintenance	44
Task Type Maintenance	47
Nature of Task	50
PM Code Maintenance	51
Routing Maintenance	52
Task/Dispatch Status Maintenance	55
Response Code Maintenance	58
Coverage Code Maintenance	58
Memo Manager Maintenance	60
The Main Menu	61
Task Data Entry	61
Dispatch Data Entry	91
Labor Charge Data Entry	95
Reservation Dispatch	98
Waiting for Receipt	101
Dispatch Closing	103
Contract Maintenance	107
Header Tab	107
Address Tab	120
Item Prices Tab	122
Labor Rates Tab	124
Billing Information Tab	126
J/Code History Tab	127
Unearned Tab	128
Unearned Tab	128

Tasks Tab	140
Auto Generate Task Selection	141
Auto Generate Task Selection	141
Quick Dispatching	144
Quick Dispatch Line Entry	
Dispatch Board	
Remote Database Update	
Auto Invoice Generation	
Auto E-Mail Generation	
Auto Contract Invoice Generation	
Revenue Recognition Register	
Payroll Batch Entry	
Close Task Selection	
Budgeting Maintenance	
The Bill of Materials Menu	
Bill of Materials Maintenance	
Header Tab	
Lines Tab.	
Production Entry	
Production Entry Register	
The Reports Menu	
Bill of Materials Report	
Component Where-Used Report	
Bill of Materials Costed Report	
Contract Billing Report	
Task/Dispatch report	
Customer Open Sales Details Report	
Contract Masterfile Audit Report	
Weekly Productivity Report	
The Inquiries Menu	
Task Inquiry	228
Task History Inquiry	229
Component Where-Used Inquiry	230
The Custom Reports Menu	
Task/Dispatch Detail Report	232
Modules and Programs in MAS 90 Modified for Service Management	<b>23</b> 3
Library Master Memo Manager Maintenance	233
A/R Memo Manager Maintenance	234
Sales Order Options	235
Inventory Maintenance	236
Product Line Maintenance	239
Customer Maintenance	240
Sales Order Entry	245
S/O Invoice Data Entry	269
Shipping Data Entry	271

S/O Auto Generate Order Selection	272
Sales Order and Invoice Printings	273
S/O Sales Journal printing	274
Invoice History Inquiry	275
P/O Auto Generate Orders Selection	276
A/R Division Maintenance	277
Payroll Data Entry	280
Job Cost Integration	
Job Masterfile Maintenance	283
Cost Code Maintenance	285
A/P Invoice Data Entry	287
Job Masterfile Inquiry	291
Job Posting Entry	292
A/R Invoice Data Entry	295
R/A processing with Bill To Customers	296
Return Merchandise Authorization Entry	296
RMA Receipts Entry	298
RMA Inquiry and Invoice History Inquiry	299
Commission Processing	301
Commission Processing activation	301
Salesperson Maintenance	302
First Sales Date	306
Generating Commissionable Contracts	308
Invoicing Tasks of Commissionable Contract	310
Visual Integrator	
Sales Order Entry (example from SM Options; Sales Kit Item Number)	316
Additional Enhancements for Service Management	321
Appendix	
Installing from Zip of Self-extracting archive file	322

#### Installation Instructions and Cautions

PLEASE NOTE: MAS 90 must already be installed on your system before installing any IIG enhancement. If not already done, perform your MAS 90 installation and setup now; then allow any updating to be accomplished automatically.

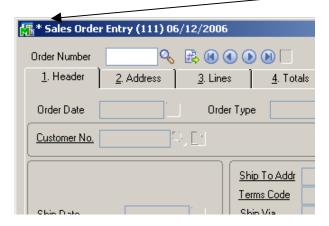
Once MAS 90 installation and file updating is complete, you may install your IIG enhancement product by following the procedure below.

Please note that <u>installation of IIG Service Management is</u> <u>different from installation of other IIG enhancements</u>. The step-by-step process of installation is described below.

## Wait! Before You Install - Do You Use CUSTOM OFFICE?

THIS IS AN IMPORTANT CAUTION: If you have Custom Office installed, and if you have modified any MAS 90 screens, you must run Customizer Update after you do an enhancement installation.

But wait! BEFORE you run Customizer Update, it is very important that you print all of your tab lists. Running Customizer Update will clear all Tab settings; your printed tab list will help you to reset your Tabs in Customizer Update. Custom Office is installed on your system if there is an asterisk in the title bar of some of the screens. The asterisk indicates that the screen has been changed.



An *asterisk* in a window's title bar indicates that the screen has been modified. This means that **Custom Office** is installed.

Follow all the instructions on this page before you run **Customizer** 

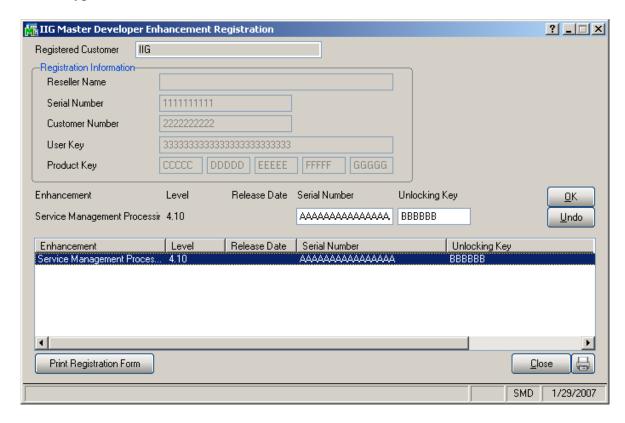
Update!

### Registering IIG products

IIG Enhancement should be registered to be able to use it. If registration is not performed, the enhancement will work in a demo mode for a limited time period. The registration can be still done during the demo period.

Select the **IIG Product Registration** program under the **Library Master Main** menu of the MAS 90.

If this option is not listed under the Library Master Setup menu, go to the main menu, and select **Run** from the **File** menu. Type in SVIIGR and click **OK**.



Enter **Serial Number** and **Unlocking Key** provided by IIG, and click **OK**.

If multiple IIG Enhancements are installed, Serial Numbers and Unlocking Keys should be entered for each enhancement.

IIG Registration Form can be printed by using the **Print Registration Form** button.

## **Installing Service Management**

After installing MAS 90 and running it to update files, close the MAS 90. To install Service Management:

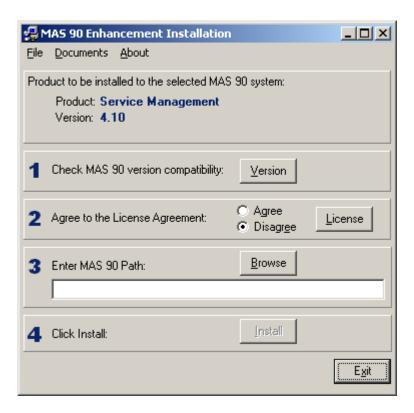
If not installing the Board Package, proceed to step 3.

- 1. Open the DispatchBoardPackage folder.
- 2. Run Setup.exe. (Note that if installing to Windows 2000 Professional, at least Service Pack 2 should be installed for Windows 2000.)
- 3. Open the SMP410\_CD folder.
- 4. Run Setup.exe.

Additionally, the dictionaries for Spell Check can be installed at any time with the SSCEDEMO.EXE from the SpellCheck folder.

### **Enhancement Installation**

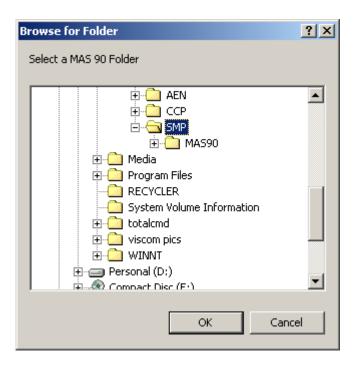
Running SETUP.EXE begins the installation process. The installation screen will look similar to this:



Click the **Agree** option (the **Install** button will not be activated till Agree is selected).

Use the **Browse** button to point where MAS 90 is installed. On the **Select MAS 90 Directory** screen, select the drive letter then select the folder where your MAS 90 is installed.

The screen should look like this:



Click **OK** to accept the folder selection.

Now click the **Install** button on the **MAS 90 Enhancement Installation** screen.

Wait for the copying files process to be finished.

## **Important Notes**

## Reservation - New Dispatch Status

**Note**: If installing on existing version of SMP that has already been used, pay attention to the **Task/Dispatch Statuses** you have been using. New pre-defined **Reservation** status has been added, with the Status Code **R**.

If you have used the Status Code **R** before, keep in mind that this Code will be now used for generating **Reservation Sales Orders**. Existing in the system dispatches with the **R** Status **Code** will not be affected; moreover, you can assign the **R** status to other dispatches without generating Reservation Sales Order, in which case the status will remain having the same meaning as before latest installation. All you will have to do is answer **No** each time the program prompts to generate Sales Order, if you do not want to use this status as Reservation.

We recommend creating new status with a different Status Code to be used for the same purpose as you have used the R Code. After that, delete the old R status code. The Reservation status will be created after installing Service Management at the moment you open and close the **Technician Code Maintenance** program.

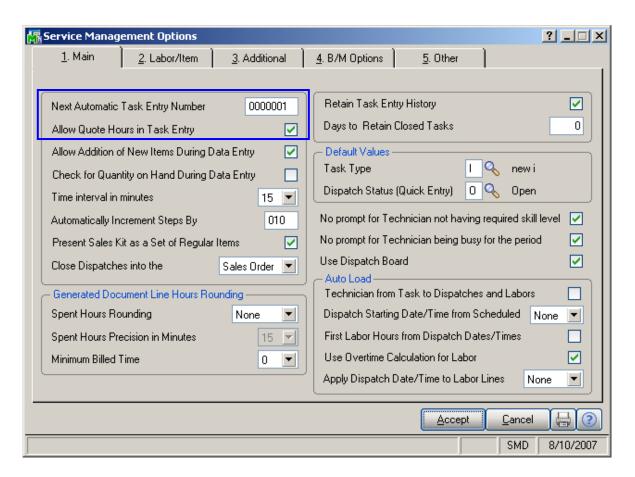
For more information of the Reservation process see the *Dispatch Data Entry* section of this manual.

## **Setup Activities**

### Service management Options

Use **Service Management Options** from the **Setup** menu to customize S/M to fit your company's individual needs.

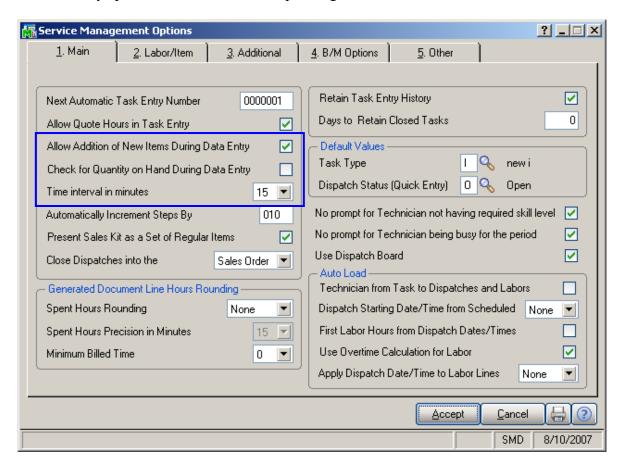
#### Main Tab



The **Next Automatic Task Entry Number** field is used to assign the next task number.

The Allow Quote Hours in Task Entry box allows you to set Quote Hours and Quote Amount when entering Task Data (in the More Information screen). When allowed, these quotas will affect also the Labor Charge Data Entry screen. Two fields for Unused hours and amount will become visible

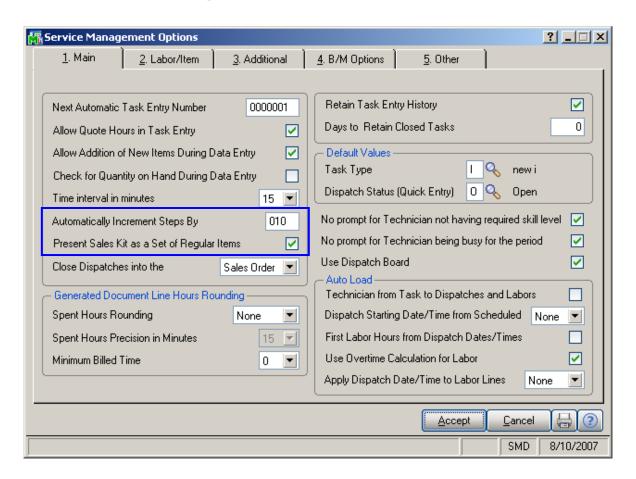
on that screen, displaying the difference between quotes and hours already spent at this task and corresponding amounts.



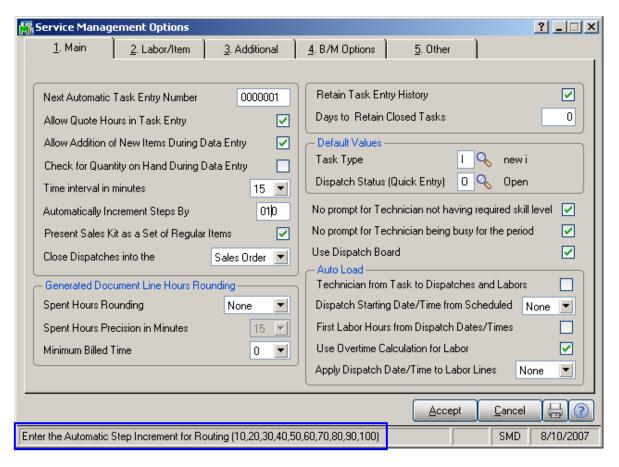
## If the **Allow Addition of New Items During Data Entry** box is selected, inventory items can be added "on the fly" when entering dispatch line items.

## If the Check for Quantity on Hand During Data Entry box is not selected, the system will ignore inventory quantities when entering dispatch lines.

Enter the **Time Interval in minutes** to be used for populating drop-down lists of the starting and ending times selection in the **Dispatch Data Entry** program.

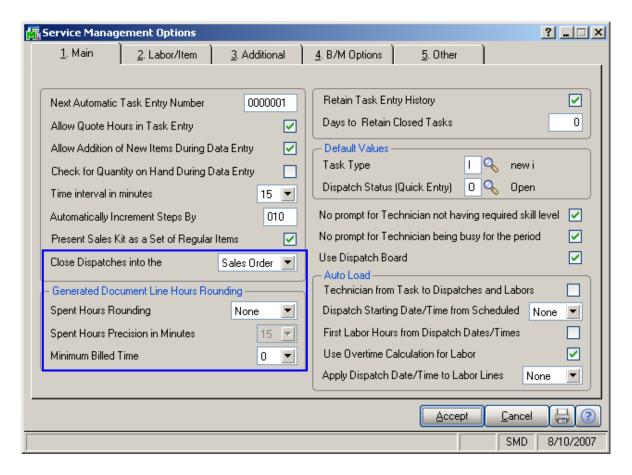


The **Automatically Increment Steps By** is used as increment for Routing Steps. Available values are listed in the status bar, when the cursor is in the field.



If the **Present Sales Kit as a Set of Regular Items** check box is selected, then the Sales Kit Item number will be replaced in that document with a comment line indicating sales kit number during Sales Order Entry or Invoice Data Entry. All the components of that kit will be presented as regular line items.

Click here for an example:



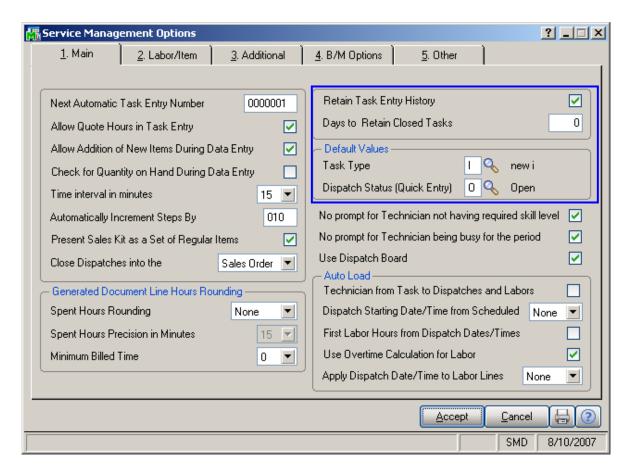
In the Close Dispatches into the dropdown menu, indicate whether charges from a closed dispatch should generate a sales order or an invoice.

The Generated Document Line Hours Rounding group provides settings for rounding the hours of dispatch labor lines during generation of sales order or invoice when the dispatch is closed.

The available methods for **Spent Hours Rounding** are **Up**, **Down**, **Closest**, **None**.

You can set the **Spent Hours Precision in Minutes** for the rounding.

The **Minimum Billed Time** dropdown menu is also set in minutes and can be set so that the specified time is always billed even the actual spent time rounded is less than this setting.

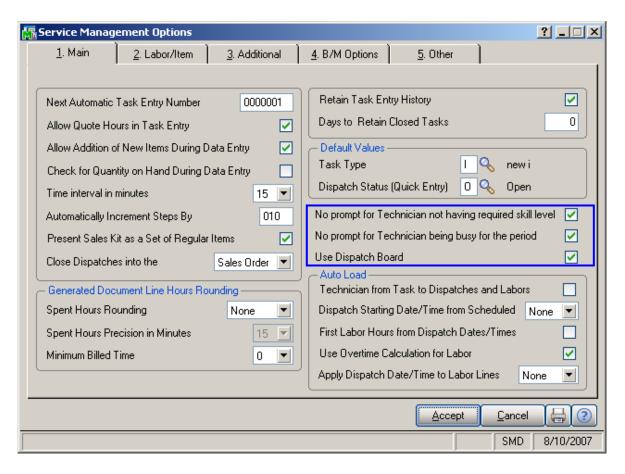


Select the **Retain Task Entry History** box if you wish to keep track of entered tasks. If this box is left unchecked, there will be no way to recover a history of entered task information later.

Task history information is displayed in the **Task History Inquiry** and the **Task History Report**.

A field allows you to specify the number of **Days To Retain Closed Tasks** in the history. After this period, you are able to delete the task manually from your history file.

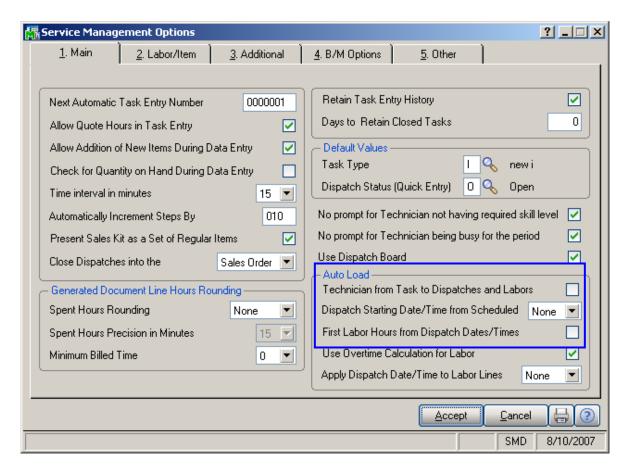
The **Default Values** group of options specifies how the values will be set by default when entering new Tasks, Dispatches, and Labors. New Tasks will have the specified Task Type by default. The Dispatches created with **Quick Dispatch Line Entry** will have the default **Dispatch Status** indicated here.



Check the **No Prompt for Technician not having required skill level** box to suppress displaying the prompt, if the technician's skill level does not match the Nature of Task, in Dispatch Board, and Sales Order Quote Entry screen.

Check the **No prompt for Technician being busy for the period** box to disable checking if the Technician is busy on
any other Dispatch with period intersecting with the period of
the Dispatch being accepted. If the box is cleared, the **Technician Busy** screen will display the list of Dispatches
with intersecting periods for the selected Technician.

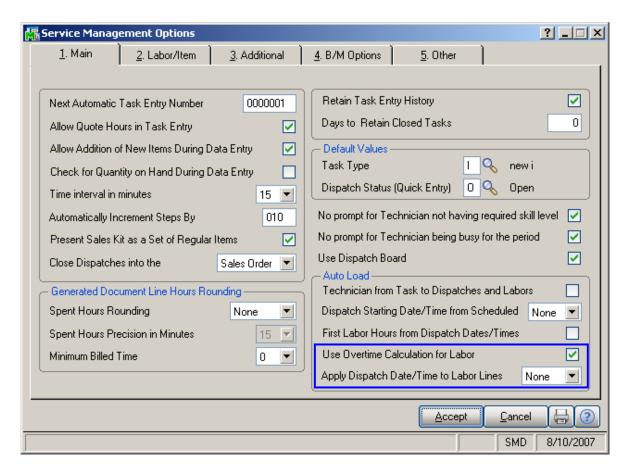
Check the **Use Dispatch Board** box if you have the Dispatch Board program installed.



In the **Auto Load** group, check the **Technician from Task to Dispatches and Labors** box to automatically load the Preferred Technician Code from the Task to the new Dispatches and the Dispatch Technician to Labor lines.

From the **Dispatch Starting Date/Time from Scheduled** dropdown list box, select whether the Dispatch Date/Time will be populated with the Task Scheduled Date/Time. You can select to load the Date/Time from the Task to **All**, only the **First**, or to **None** of the Dispatches.

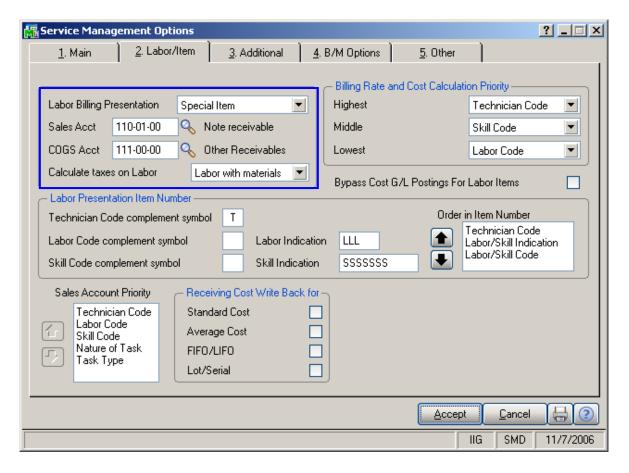
Check the **First Labor Hours from Dispatch Dates/Times** box to automatically calculate the Hours for the first entered Labor line of the Dispatch, based on the Dispatch Starting and Ending Dates/Times.



Select the **Use Overtime Calculation for Labor** box to enable special calculation of Labor with Overtime Factor, based on the working hours and Coverage Code.

From the **Apply Dispatch Date/Time to Labor Lines** dropdown list box, select the method of loading the Dispatch Date/Time during Labor Lines entry. You can select to load the Date/Time from the Dispatch to **All lines** of the Labor part, only the **First line** entered, or to **None** of the Labor lines.

#### Labor/Item Tab



**Labor Billing Presentation** group is a set of controls that allows the user to choose from the following options for charges or labor billing presentations.

If **None** is selected, the system will not process labor charges.

If **Inventory Item** is selected, the system will build an Inventory Item based on the Technician Code of the person who performed the Task and Labor or Skill Code of the job that was performed.

The **Product Line** should be specified.

If **Miscellaneous Item** is selected in the **Labor Billing Presentation** field, the system will build a
Miscellaneous Item based on the Technician Code of

the person who performed the Task and Labor or Skill Code of the job that was performed.

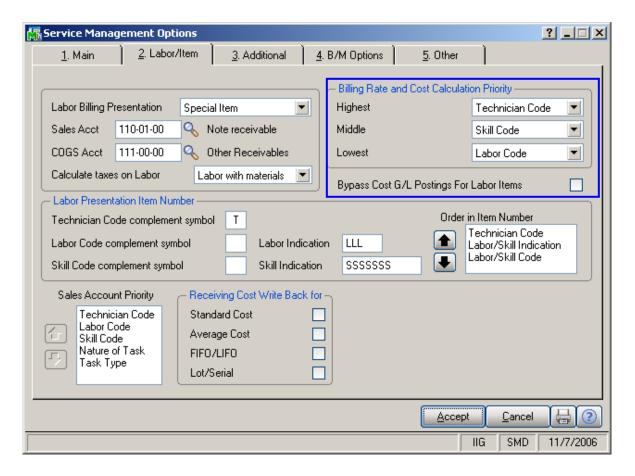
The **Miscellaneous Item** to be copied from should be

The **Miscellaneous Item** to be copied from should be selected.

If **Special Item** is selected, the system will build a Special Item based on the Technician Code of the person who performed the Task and Labor or Skill Code of the job that was performed.

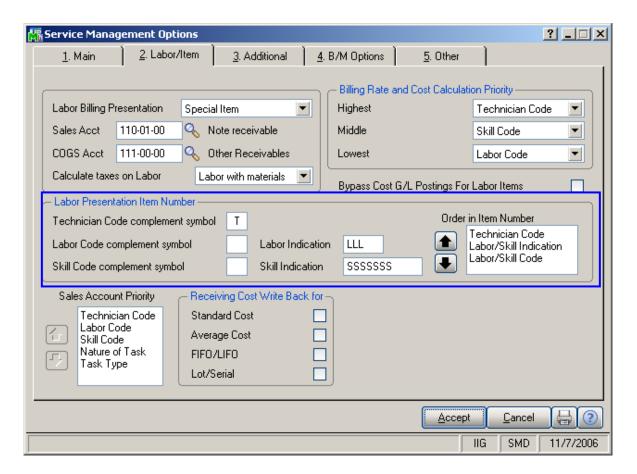
The **Sales** and **COGS Accounts** should be selected.

In the Calculate taxes on Labor drop-down box, way of taxes to be calculated on the Labor is specified. No means that Tax Class cannot be specified on the Dispatch Line, and will be set to NT in the generated Sales Order or Invoice. Labor only means that Tax Class will be used from the Dispatch Line irrespective of other non-Labor lines on the Dispatch. Labor with material means that Tax Class will be used from the Dispatch Line only if the Dispatch contains material lines (inventory, miscellaneous, special items). Comments are not considered material lines. If the Labor Presenting item is generated anew, the Tax Class for it will be set from the corresponding Labor/Skill.



The Billing Rate and Cost Calculation Priority group of controls will define the priority by which labor billing rates and costs will be calculated. Rate and Cost can be used from Technician Code, Labor Code, or Skill Code.

The **Bypass Cost G/L Postings For Labor Items** allows to process items generated for labor with zero cost, that is, cost is not posted to G/L.



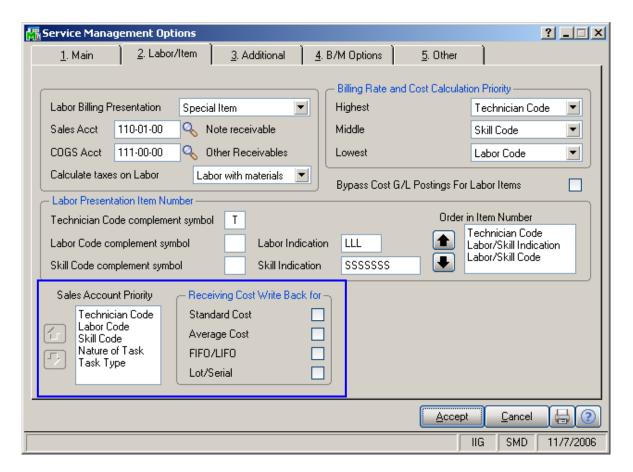
**Technician Code complement symbol** will be used to complement the technician code to four symbols.

**Labor Code complement symbol** will be used to complement the labor code to seven symbols.

**Skill Code complement symbol** will be used to complement the skill code to three symbols.

**Labor Indication** or **Skill Indication** will be used when item is constructed from labor or skill, correspondingly.

In the **Order in Item Number** list, you can set the order of components in the constructed number, with the help of the **Arrow** buttons.



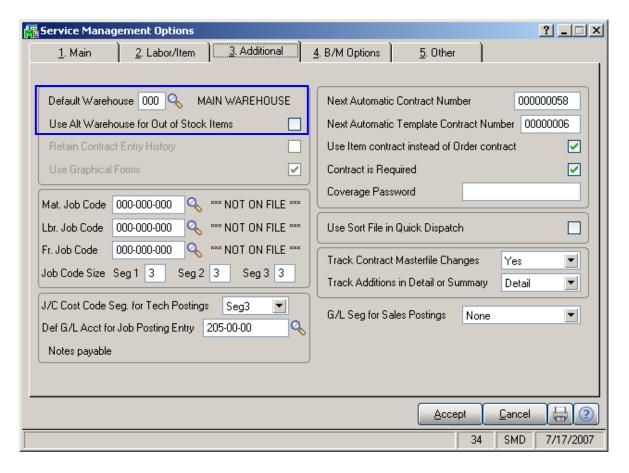
Sales Account Priority defines the priority of using the G/L accounts for sales postings of Service Management. G/L accounts are set in the Technician Code Maintenance, Labor Code Maintenance, Skill Code Maintenance, Nature of Task Maintenance and Task Type Maintenance.

The first in the list will be used if on file, otherwise the second will be used, etc.

The **Receiving Cost Write Back for** group enables using the receiving cost during the invoice update.

This option can be set separately for the following Valuation types of items: **Standard Cost**, **Average Cost**, **LIFO/FIFO**, **Lot/Serial**.

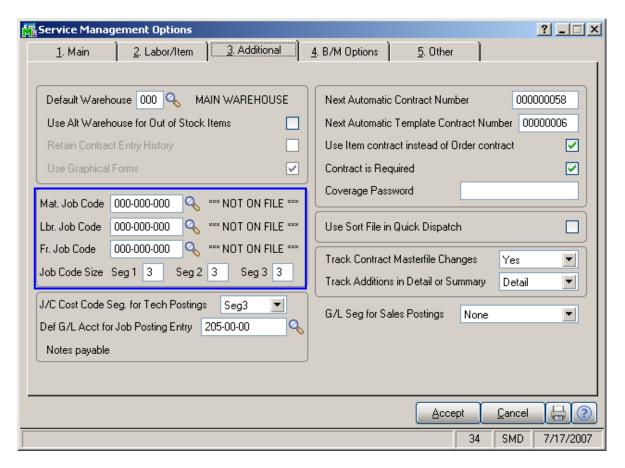
#### Additional Tab



The **Default Warehouse** field is only accessible if you have installed the Inventory Management module for MAS 90 on your system, and multiple warehouses are used.

The warehouse selected is used as the default when entering items in the Dispatch Data Entry.

You can look for items in other warehouses to fill dispatch lines if you indicate that alternate warehouses can be used for out-of-stock items. Check the **Use Alternate Warehouse for Out of Stock Items** box to enable this option.

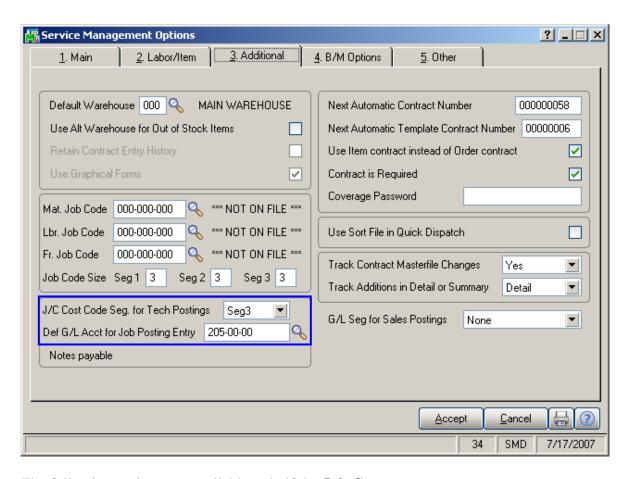


**Job Codes** are used to track material and labor cost and revenue in the contract file. Job Codes are entered for each inventory item, for posting of material related information and in the Technician, Labor and Skill Code Master files for labor information tracking.

You can add new codes in the **Job Codes Maintenance** program in the Service Management
Main menu.

If no Job Codes are assigned to inventory items or charge codes, the default job codes specified in **Service Management Options** will be used for material or labor items.

A total of nine characters can be used for Job Codes. You can define segmentation of the Job Codes by changing the appropriate setting on the Service Management Options screen here on the second tab.

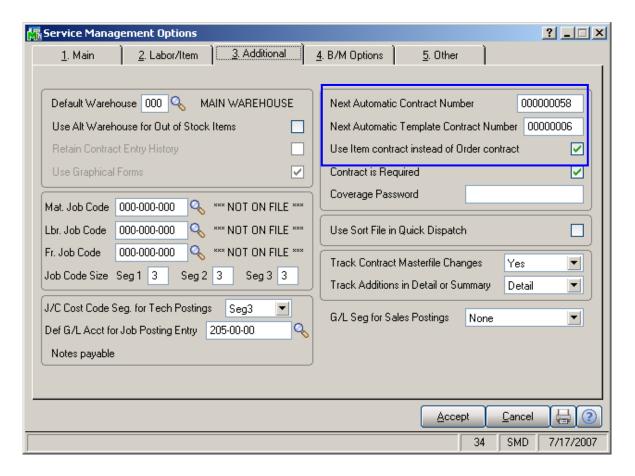


The following options are available only if the **Job Cost** module is installed and setup in the system.

The J/C Cost Code Seg. for Tech Posting is used for specifying the segment of Cost Code that should be substituted with Cost Code Segment Value entered in the Technician Code Maintenance (if any), during the import in the Job Posting Entry.

The **Def G/L Acct for Job Posting Entry** is used as default value for **G/L Account** during the import in the **Job Posting Entry**, if the **Post to G/L for Work in Process** option is selected in the **Job Cost Options**, or if the **Post to G/L for Work in Process** option is not checked but there is no **G/L Account** specified for the Material **Cost Type** of the selected **Cost Code**.

Note: If **Def G/L Acct for Job Posting Entry** is not set, the lines will not be imported in **Job Posting Entry**.

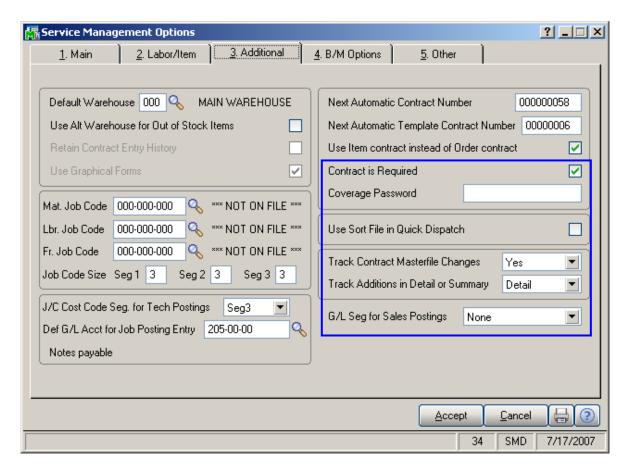


**Next Automatic Contract Number** field is used to specify the next Contract Number.

#### The Next Automatic Template Contract Number

field is used to specify the next Template Contract Number. A template contract is used to generate a regular contract (such as a standard service contract) whenever a particular item is sold. If you enter a template contract once and then assign it to an item in **Inventory Maintenance**, the system will automatically set up a contract adhering to the rules of the template for any customer who purchases that item.

Check the Use Item contract instead of Order contract box to attach the contract specified for the Item in the Inventory Maintenance program instead of the contract specified in the Sales Order Entry to the tasks generated for the item.



Users can specify whether or not a contract is required with a client by selecting the **Contract is Required** checkbox. If the checkbox is marked, users will have to specify the contract number during **Task Data Entry**.

**Coverage Password** allows editing contract amount and coverage options.

If the **Use Sort File in Quick Dispatch** check box is not selected, the **Quick Dispatching** program loads all the newly updated/created information. Otherwise, if the **Use Sort File in Quick Dispatch** check box is selected, the **Quick Dispatching** program displays only existing information.

From the **Track Contract Masterfile Changes** dropdown list box, select which changes to Contracts you want to track. You can select **Yes** for tracking all kind of changes, **No** for not tracking at all, or tracking of **Deletions**, **Additions**, or **Changes**.

From the **Track Additions in Detail or Summary** dropdown list box, select whether you want to track detailed or summary information for Contract changes.

Select G/L Seg for Sales Postings that represents the segment that is substituted when posting sales by division. By selecting a segment description at this field, you can determine whether sales, cost of goods sold and inventory postings are applied to substituted accounts based on division. A substituted account is defined by selecting an account and one of its associated sub accounts.

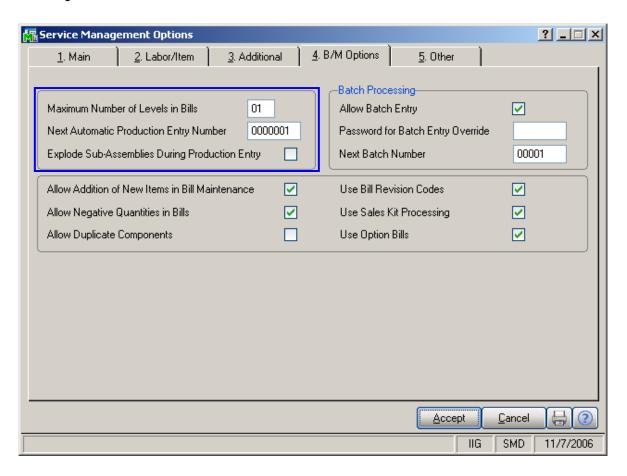
If **None** is selected at this field, all sales, cost of goods sold, and inventory postings are applied to default accounts, regardless of the division.

This field only displays descriptions of sub account segments defined in **General Ledger Account Structure**Maintenance.

You will get the following message when selecting some segment description (not **None**), then changing the Balance accounts on the Contract, and then again changing the segment description in the Options:



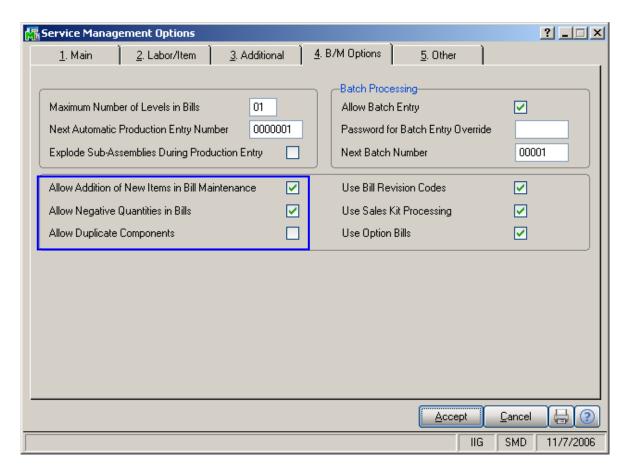
#### B/M Options Tab



The **Maximum Number of Levels in Bills** is used when displaying bills. It is recommended that you set the maximum number of levels to two levels greater than the anticipated maximum. This option is used as a safety precaution to prevent an endless loop from occurring in Bill of Materials reports when the parent bill has been entered as a component of one of its subassembly items.

**Next Automatic Production Entry Number** is used to assign the next Production entry number.

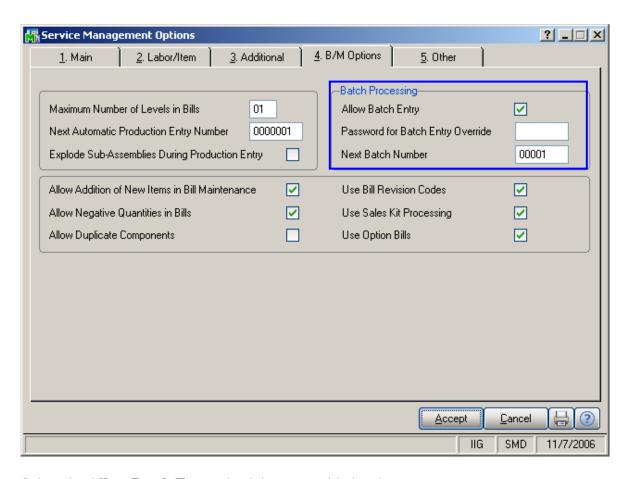
Select the **Explode Sub-Assemblies During Production Entry** check box to explode subassemblies. Clear the check box if you do not want to explode subassemblies.



If the **Allow Addition of New Items in Bill Maintenance** is checked, it allows inventory items to be added "on the fly" when entering Bill of Material information.

Allow Negative Quantities in Bills is used with Option Bills to allow negative quantities for component items of a bill.

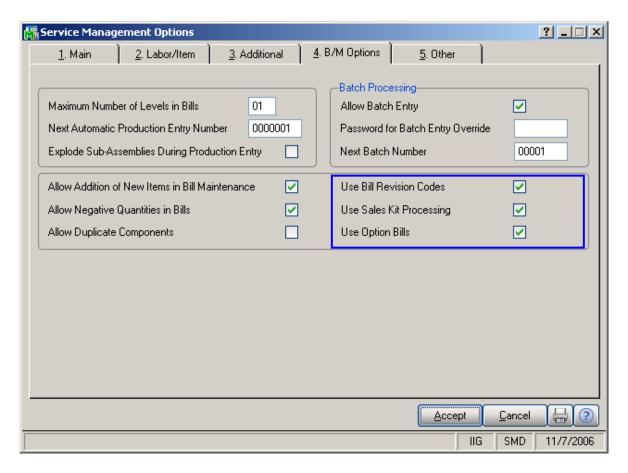
**Allow Duplicate Components** lets you have two identical line items for a bill.



Select the **Allow Batch Entry** check box to enable batch entry within **Production Entry**.

Enter the **Password for Batch Entry Override**. This password is requested when a user attempts to either access a private batch created by another user or change the private batch flag for a batch created by another user.

**Next Batch Number** is used to assign the next batch number in the Automatic Batch Entry feature in **Production Entry**.



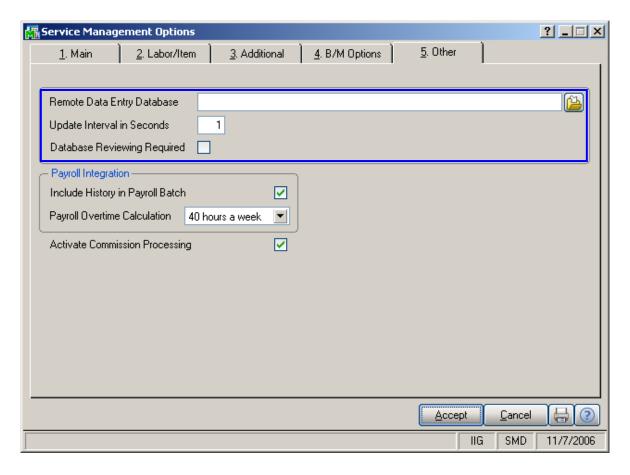
Use Bill Revision Codes allows you to do the following:

- If selected, changes to a Bill of Materials can be tracked using a three-digit revision code.
- Using revisions allows you to retain a complete history of the evolution of your product each time a bill is modified.
- A duplicate of the entire bill is stored for each revision entered.
- A revision code must be entered each time a bill of material is referenced to insure that the correct items and quantities are listed.
- Revision codes are beneficial in situations where service or repairs are required on a previous version of a Bill of Material.

Check the **Use Sales Kit Processing** box to be able to use Kits in Bills.

Check the **Use Option Bills** box to be able to use Options in Bills.

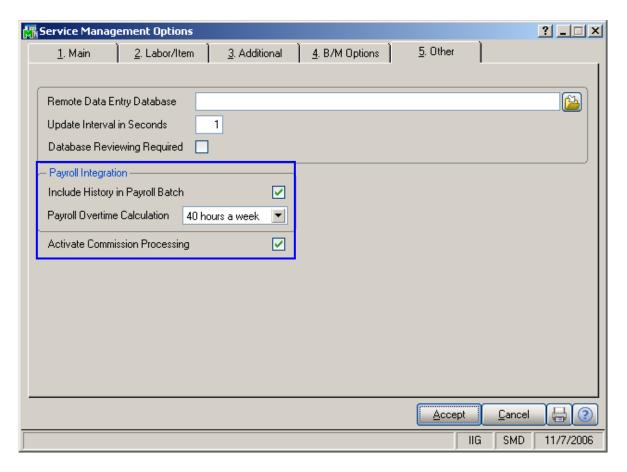
#### Other Tab



The **Remote Data Entry Database** field allows you to select an MS Access file that will be used for entering data via web.

Enter the **Update Interval in Seconds** to specify the interval with which the Remote Database Update program will scan the file for changes.

Check the **Database Reviewing Required** box to make sure the status is set to correct value.



Check the **Include History in Payroll Batch** box to have the program search for labor records during the given period in the S/M history as well. This setting is the default setting for all Payroll Batch Entries, and can be changed on each separate Payroll Batch Entry.

The Payroll Overtime Calculation can be set to 8 hours a day or 40 hours a week. This determines how the hours over time will be calculated - on the daily or weekly basis.

You can **Activate Commission Processing** by checking the box. See the **Commission Processing** section for details.

### Job Code Maintenance

**Job Codes** are used to track material and labor cost and revenue in the contract file.

Service Management modifies several standard MAS 90 programs, including Inventory Maintenance, Charge Code Maintenance and others, adding a new field – the Job Code field. You can assign job codes to the inventory items and charge codes in order to track their usage by service contracts.

The **Job Codes Maintenance** program from the **Service Management Main** menu allows you to add and remove Job Codes.

If no Job Codes are assigned to inventory items or charge codes, the default job codes specified in **Service Management Options** will be used for material or labor items.

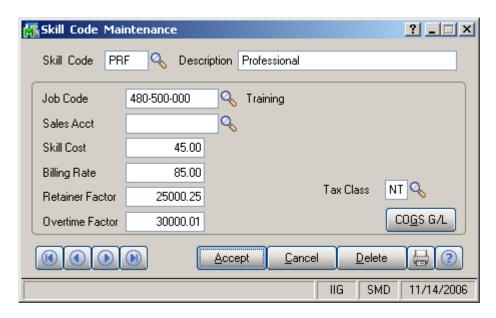
A total of nine characters can be used for Job Codes. You can define segmentation of the Job Codes by changing the appropriate setting in the second tab of **Service Management Options**.



### Skill Code Maintenance

In Service Management, **Skill Codes** describe, in a generic way, the type of work a technician can perform. The **Skill Code Maintenance** program is used to maintain, edit and add skill codes used in the Service Management Module.

Skills defined in this program are used during Technician Code Maintenance to describe the different skills, at appropriate levels, of each technician. This allows you to pick the appropriate or most qualified technician during Task or Dispatch Data Entry.



**Job Code** is used when posting labor charges to the contract file.

**Sales Acct** is used for postings when closing dispatches with labor (based on the priority in Options).

**Skill Cost** is used for posting cost to contracts for transactions generated when closing dispatches with labor (based on billing rate calculation).

**Billing Rate** is the billing rates for labor items subject to contract settings or the billing rate calculation priority set-up in **Service Management Options**.

The **Retainer Factor** is used when calculating used hours from the contract hours.

The **Overtime Factor** is used for calculation of hours during Labor lines entry for the hours out of the coverage period defined by the **Coverage Code** of the task.

Clicking the **COGS G/L** button opens the **Cost Of Goods Sold** screen, where you can specify account to be used for the labor items generated from the selected Skill during dispatch closing into Sales Orders or Invoices.

The COGS G/L button is available only if the Labor Billing Presentation is set to Inventory Item in the Service Management Options.



Different G/L accounts can be set for different **Product Lines** and for all the Product Lines (empty Product Line) not having separate accounts specified.

The COGS G/L button is available only if the Labor Billing Presentation is set to Inventory Item in the Service Management Options.

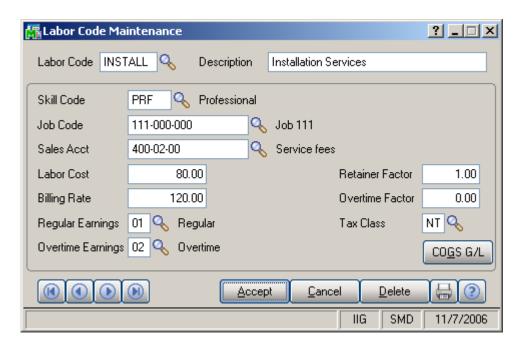
The account specified for the **Product Line** set in the **Service Management Options** will be used for the generated inventory items.

If there is no account set for that Product Line, the program uses the account set **without Product Line**.

### Labor Code Maintenance

In **Service Management**, **Labor Codes** describe, in a detailed way, the type of work a technician can perform.

The **Labor Code Maintenance** program is used to maintain, edit and add labor codes used in the **Service Management** Module.



**Skill Codes** are used to specify to which Skill Code group this labor code belongs. A single Skill Code can include any number of individual labor codes. Using the **Skill Code** during Dispatch Data Entry can reduce confusion and speed your data entry.

**Job Codes** are used when posting labor charges to the contract file.

**Sales Account** is used for postings when closing dispatches with labor (based on the priority in **Service Management Options**).

**Labor Cost** is used for posting cost to contracts for transactions generated when closing dispatches with labor (based on billing rate calculation).

**Billing Rate** is the billing rates for labor items subject to contract settings or the billing rate calculation priority set-up in **Service Management Options**.

Select the **Regular** and **Overtime Earnings Codes** from the **Earnings List**. Earnings Codes are set in the **Earnings Code Maintenance** under the **Payroll Setup** menu.

The **Retainer Factor** is used when calculating used hours from the contract hours.

The **Overtime Factor** is used for calculation of hours during Labor lines entry for the hours out of the coverage period defined by the **Coverage Code** of the task.

Tax Class will be used in the Dispatch by default, if the Task's Ship To Address has Calculate taxes on Labor checked and the Calculate taxes on Labor option is not set to No in Service Management Options. If the Labor Presenting item is generated anew during dispatch closing, this Tax Class will be set for it.

Clicking the **COGS G/L** button opens the **Cost Of Goods Sold** screen, where you can specify account to be used for the labor items generated from the selected Labor during dispatch closing into Sales Orders or Invoices.



Different G/L accounts can be set for different **Product Lines** and for all the Product Lines (empty Product Line) not having separate accounts specified.

The account specified for the **Product Line** set in the **Service Management Options** will be used for the generated inventory items.

If there is no account set for that Product Line, the program uses the account set **without Product Line**.

Service Management 4.	1	(	)
-----------------------	---	---	---

# Territory Code Maintenance

The **Territory Code Maintenance** program is used to maintain territory codes, which can later be entered onto technician and customer ship-to records.

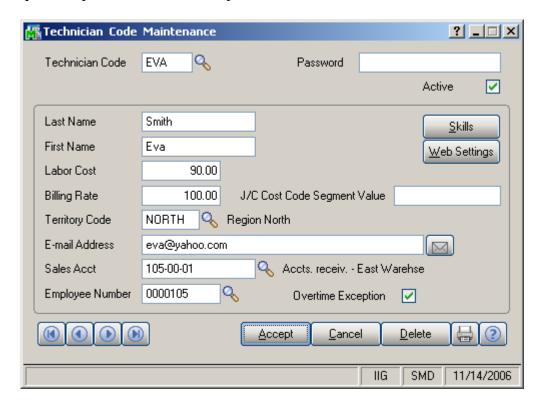
The **Territory Code** can then be used as a selection criterion in the **Quick Dispatching** program in order to match technicians and task job sites with the same **Territory Code**.



### Technician Code Maintenance

The **Technician Code Maintenance** screen is used to maintain, edit and add technician codes used in the **Service Management** Module.

The **Technician Code Maintenance** program is used to enter technicians' qualifications using a set of skill codes and a performance evaluation level (0 to 9) for each skill. **Dispatch Entry** uses skill information taken from **Technician Code Maintenance** to match skill requirements with a list of available personnel. This returns a list showing only the qualified personnel available to perform the task.



Enter new **Technician Code** to add or an existing one to modify data.

Enter the **Last** and **First Names** and **E-mail Address** of the technician in the appropriate fields.

Use the **Labor Cost** field and the **Billing Rate** field to enter hourly cost and price information for a given Technician Code.

The J/C Cost Code Segment Value is used during the import in the Job Posting Entry, to substitute the J/C Cost Code Seg. for Tech Posting specified in the Service Management Options.

Enter the **Territory Code** for the area covered by the technician. The code must have been previously entered in the **Territory Code Maintenance** screen. This code is used to search for Tasks and Dispatches elsewhere in the system.

**Sales Acct** is used for postings when closing dispatches with labor (based on the priority in **Service Management Options**).

**Employee Number** sets the connection between the Technician Code and Employee Number used in the **Payroll** module.

Check the **Overtime Exception** box to denote that workday for this technician equals to 10 hours instead of usual 8.

Clear the **Active** check box, if the **Technician** is not available for assigning dispatches. The Technicians with the **Active** option not selected cannot be selected anywhere for new Tasks and Dispatches. Existing Task and Dispatches of the inactive technician can be still processed.

Press the **Skills** button to submit the technician qualification information using the existing skills defined in the **Skill Code Maintenance** program.

The following screen will appear.



Enter the desired **Skill Code** for the technician.

Enter the **Skill Level Number** representing the technical expertise required for satisfactory task completion. Skill level can be from 0 to 9.

# Task Type Maintenance

The **Task Type Maintenance** program is used to maintain task type codes.



**Sales Acct** is used for postings when closing dispatches with labor (based on the priority in **Service Management Options**).

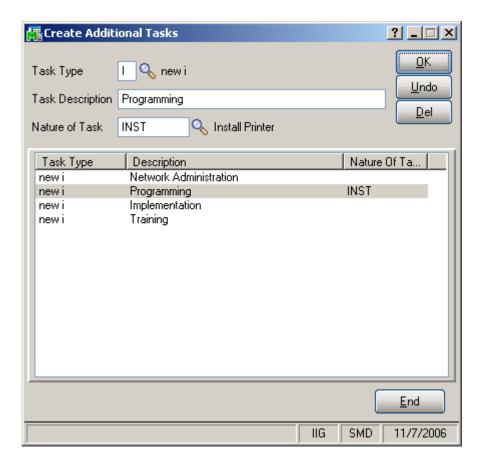
Enter the **Type Code** and check the **Create Additional Tasks** box to have the program create records for the additional tasks. The tasks will be generated at the moment you're accepting a new task of this type in the **Task Data Entry**.

By default, the list of the additional tasks contains four tasks of the type set as default in the **Service Management Options**. Click the **Additional Tasks** button to view the list in the **Create Additional Tasks** screen. You can change the number and types of the tasks to be created in this screen.

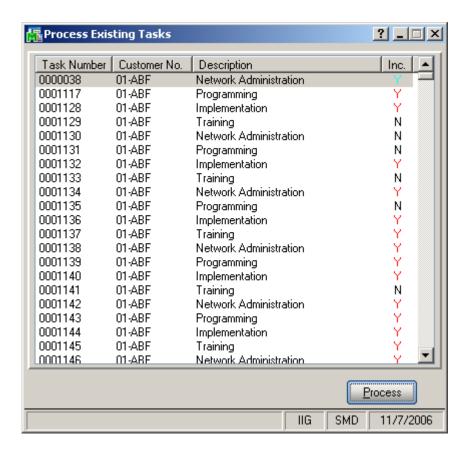
If you delete all the additional tasks in the list, and close the **Create Additional Tasks** screen, the check box in the **Task Type Maintenance** will be automatically cleared. You must check it anew and click the button, if you want to add tasks after that.

If you check the **Create Additional Tasks** box and do not click the **Additional Tasks** button, the program will use the four default records to create additional tasks.

Here is the **Create Additional Tasks** screen with the default additional tasks records:



You can also create additional tasks for the existing tasks in the system. This is useful when you do not want to generate additional tasks at the moment of entering and accepting the task, but want to generate them afterwards. Click the **Process Existing Tasks** button to view the list of existing tasks of the selected type.



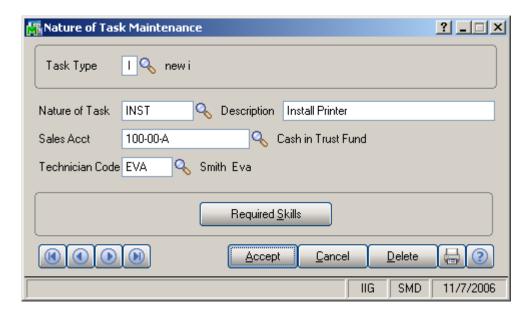
The **Include** column displays if you want to include task into processing.

Double-click tasks to change their including setting.

Click the **Process** button.

#### Nature of Task

The **Nature of Task Maintenance** program is used to maintain, edit and add Nature of Task codes used in the **Service Management** Module. This program can also be used to list the skills required to perform these tasks, in order to match the task to a technician.



Enter **Task Type** or select it from the lookup for the Nature of the Task you wish to maintain.

Enter the desired **Nature of Task** code to add or maintain and a **Description** for the Nature of Task.

**Sales Acct** is used for postings when closing dispatches with labor (based on the priority in the **Service Management Options**).

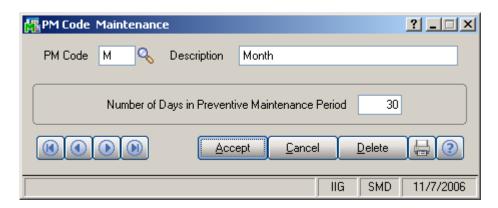
Select the **Technician Code** to be loaded by default when selecting the **Nature of Task**.

Use the **Required Skills** button on the **Nature of Task Maintenance** screen to open the **Skills Level Assignment**screen. Use this screen to specify the list of skills needed for
the assigned tasks.

### PM Code Maintenance

The **PM Code Maintenance** is used to maintain, edit and add PM (Preventive Maintenance) codes used in the **Service Management** Module.

The **PM Code** can be assigned to a preventive maintenance contract entered in **Contract Maintenance**. The system will then use the number of days associated with the PM Code to automatically generate a preventive maintenance task at the appropriate time, when the **Auto Generate Task Selection** program is run.



Enter the desired **PM Code** you wish to enter or maintain.

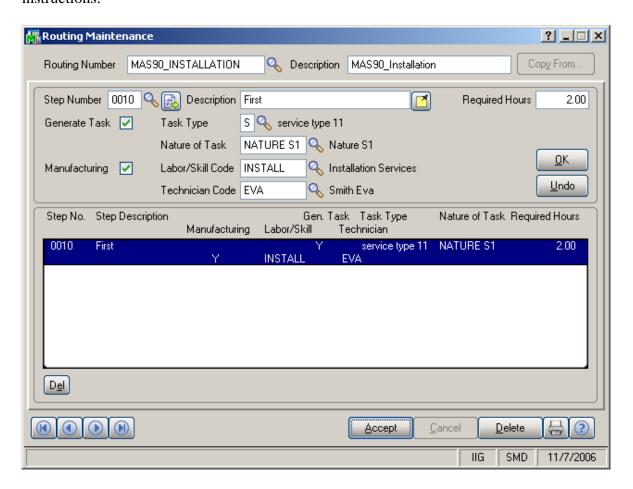
Use the **Description** field to enter or maintain the description for specific PM Code. This description may be up to thirty characters in length.

Use the **Number of Days in Preventive Maintenance Period** field to enter the frequency (measured in days) with which the maintenance task should be performed.

# Routing Maintenance

Routing Maintenance is a program that allows entry of repair tasks to be performed on a given item, or for entry of tasks required to install an item that has been sold. For the system to generate the tasks listed in the routing for the repair or installation of an item, the item must be entered in **Bill of Materials Maintenance** along with the desired **Routing Number.** 

The term "Routing" is used in this case to describe the total set of steps, of any kind, taken to complete a dispatch or task. "Routing" can be any kind of alphanumeric information, as well as the commonly understood repair and installation instructions.



Enter the **Routing Number** that represents the series of steps to be performed in completing a repair or an installation.

Enter the **Description** (effectively, the name) of the routing in this field. You may use up to thirty characters for the description.

Enter the number of the step you wish to add or maintain in the **Step Number** field. Use the **Next Number** icon to accept the next automatically incremented step number.

If the **Step Number** represented by the next incremented value already exists, then the difference between the current step number and the step represented by the multiple will be divided by two.

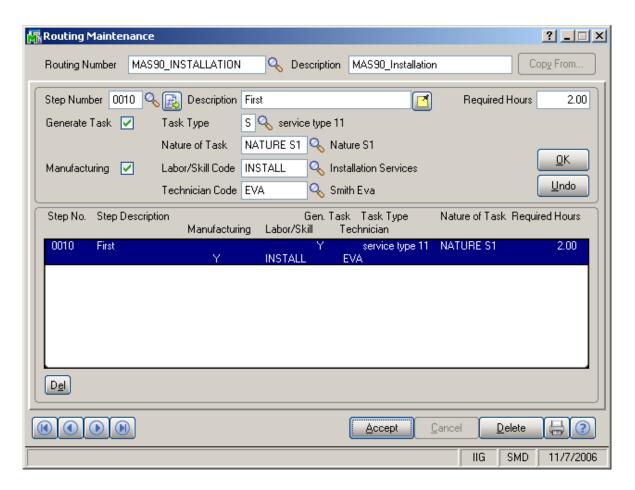
If you are entering the first step number for a new routing, clicking the **Next Number** icon will insert **Step Number 0000** automatically.

Enter the **Step Description**. You may use as many characters as you wish to describe each step in the routing. The **Step Text Maintenance** window will appear when you exceed the initial thirty-character count.

During normal use of this screen, only the first thirty characters will be shown in the **Routing Maintenance Description** field. Clicking the button allows you to see the additional characters.

Choose the **Text** button to display the **Step Text Maintenance** window. If an extended step description has been entered for the step, \*Ext\* appears to the right of the **Text** button.

Enter the **Required Hours** planned to complete this step.



Select the **Generate Task** box to mark this step as a task, which can be automatically dispatched by the system when an item with this routing is sold or needs repairing.

If the **Generate Task** box is checked, select a **Task Type** describing the task. This will be transferred automatically to the generated task, and can be used for assigning a technician with the skills appropriate for completing the task.

If the **Generate Task** box is checked, enter a **Nature of Task** describing the task. You can click the **Lookup** button and select it from the list, which changes based on the Task Type. This will be transferred automatically to the generated task.

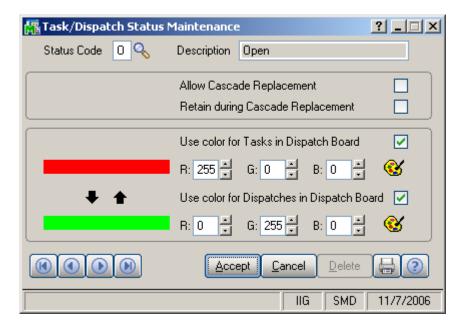
The **Manufacturing** check box is available only for Steps with the **Generate Task** option selected.

If the **Manufacturing** box is selected for a **Step**, the **Labor/Skill Code** and **Technician Code** fields become visible, allowing for selection for that Step.

For **Manufacturing** Step, Dispatch with Labor Charge line will be generated when generating Task, using the specified **Labor/Skill** and **Technician** Codes.

# Task/Dispatch Status Maintenance

The **Task/Dispatch Status Maintenance** program is used to maintain task/dispatch status codes, which are used to display the current status of tasks and dispatches. For example, task can be opened or closed, entered or waiting for a receipt.



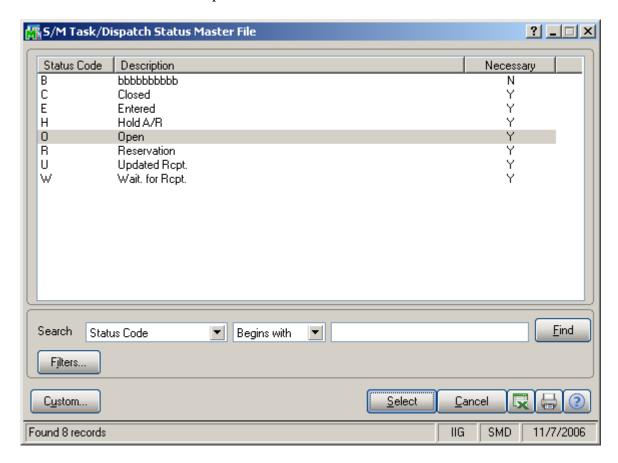
Check the **Allow Cascade Replacement** box if you want to have the Status applied to the Dispatches when applying it to the Task.

Check the **Retain during Cascade Replacement** box if you want the Status to be retained for the Dispatches when applying cascade replacement from the Task.

Check the **Use color for Tasks/Dispatches in Dispatch Board** box, to display Color Bars for statuses of Tasks or Dispatches, correspondingly.

When the box is checked, the color selection fields become enabled. You can enter RGB of the color, or click the **Lookup Colors** icon to select color in the standard Windows **Color** dialog box.

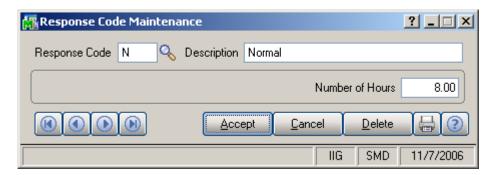
The previews display currently selected colors. You can use the arrows to easily copy one of the selected colors to the other. Clicking the **Status Code** Lookup button displays the **S/M Task/Dispatch Status Master File** screen with the list of Status Codes with their descriptions.



There are several standard Status Codes that are always present in this list. Besides, you can add new codes for your special needs, delete them and modify their settings. However, the standard Status Codes cannot be deleted.

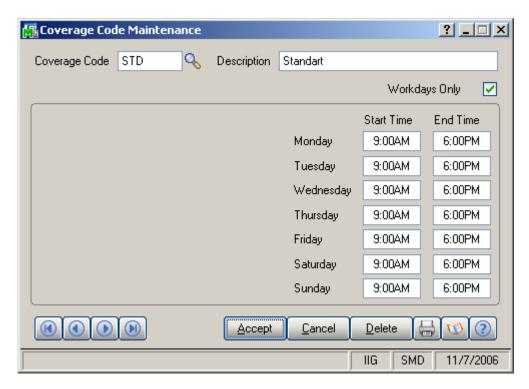
# Response Code Maintenance

The **Response Code Maintenance** allows entry of **Number of Hours** for each Response Code.

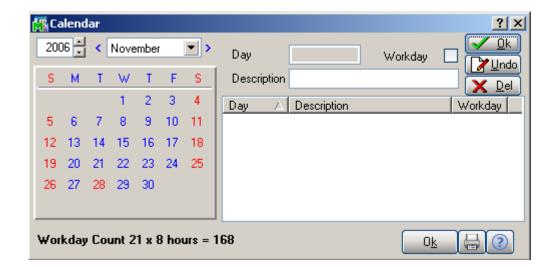


# Coverage Code Maintenance

The **Coverage Code Maintenance** allows entry of coverage hours for each of day of the week. Each Coverage Code can be specified as **Workdays Only** or not.

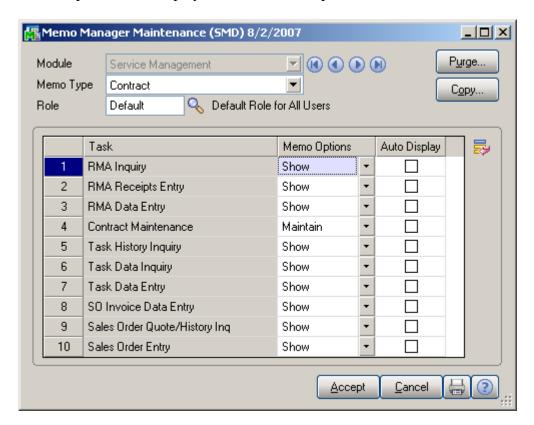


Clicking the **Calendar** button displays the **Calendar** screen, where you can specify the Workdays and Holidays.



# Memo Manager Maintenance

The **Memo Manager Maintenance** program allows setting Memo Options to be displayed on the screens specified here.

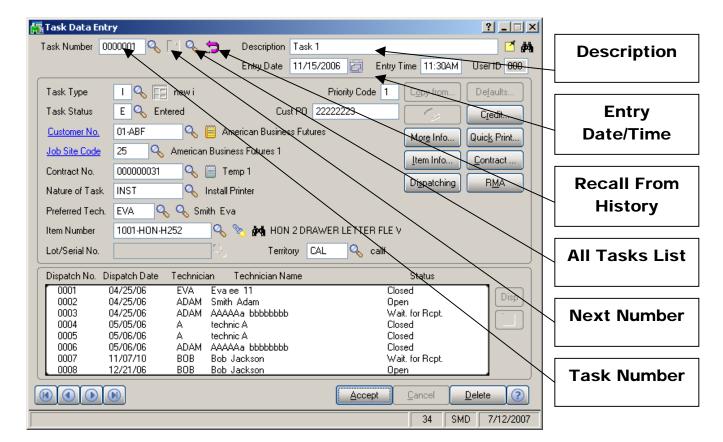


# The Main Menu

# Task Data Entry

**Task Data Entry** is used to allow entry of tasks to be dispatched in response to calls received from customers. It can also dispatch for tasks generated automatically by the following processes in the Service Management System:

- Tasks detailing installation steps generated by the Sales Order Entry program.
- Tasks generated for special items by the Sales Order Entry program.
- Tasks generated for Preventive Maintenance by the Auto Generate Task Selection program.



You may enter the **Task Number** you want to add or maintain manually by typing it into the **Task Number** field.

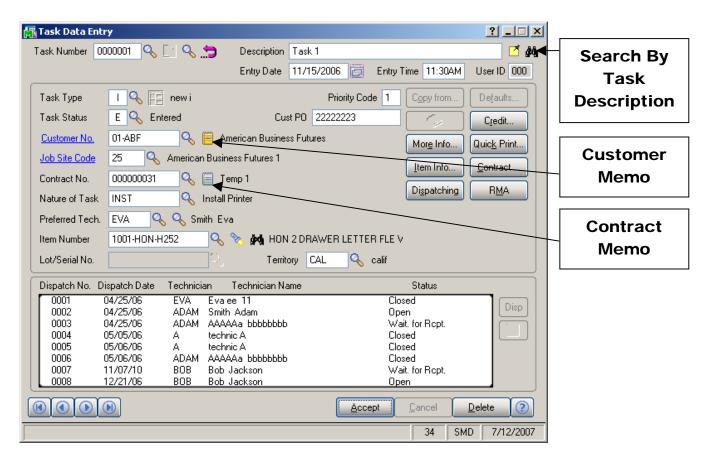
If you are adding new tasks, click the **Next Number** icon to accept the next new Task Number, which the program will increment automatically.

Click the **All Tasks List** lookup button to view all the tasks including both Active and History tasks. You can select an active task, or select a History task, which will be prompted to be recalled from history.

Click the **Recall From History** button to view History tasks.

Enter the **Description** of the task to be performed. The program allows you to enter an extended description. Click the **Extended Task Description** button to enter more detailed description. You can use the Spell Check there.

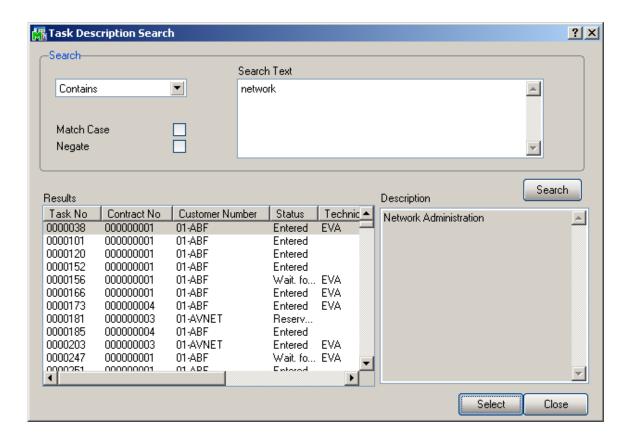
By default, the system sets the **Entry Date** and **Time** to the current date and time. You can change it.

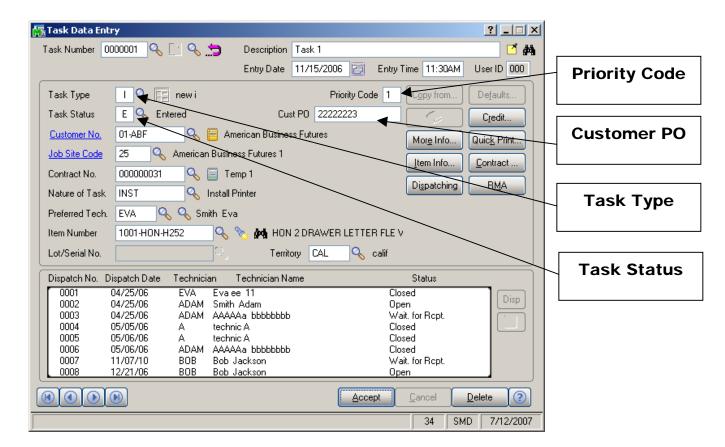


Click the **Search By Task Description** button to open the **Task Description Search** screen. You can select any task.

Click the **Customer Memo** button to create Memo for current customer.

Click the **Contract Memo** button to create Memo for current contract.





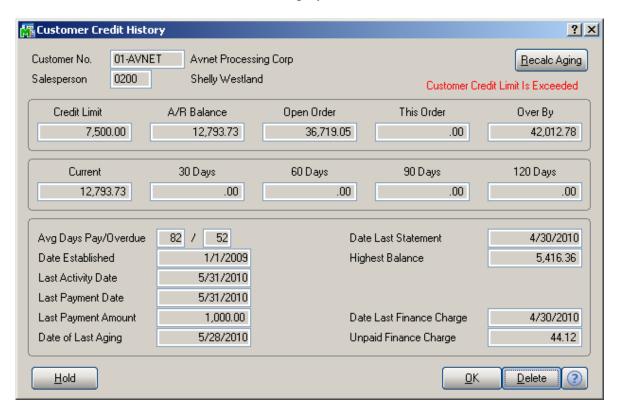
Enter desired **Priority Code** for the task. **Priority Code** is used as a search term for the task.

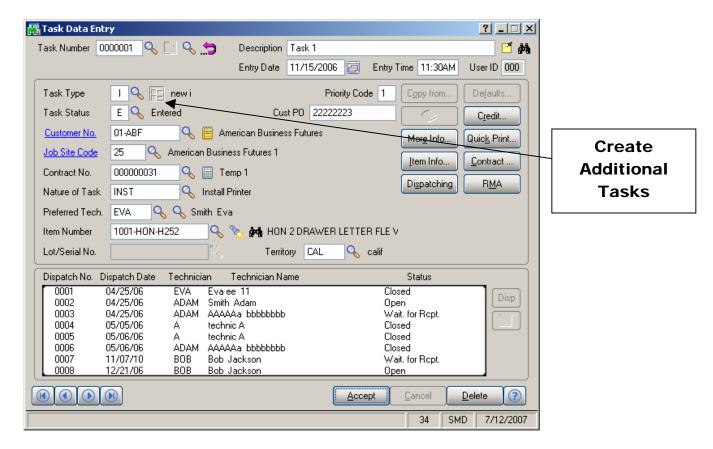
Enter the **Customer Purchase Order** number for this task.

Enter the desired **Task Type**. Task Type is used as a search term for the task. In addition, the Nature of the Task entered later must be of this Task Type. The tool tip displays the Type Code of the task. This is useful when you delete type in the Type Maintenance, and forget the type of task, while the "Not On File" message is displayed in the field.

Enter desired **Task Status**. Task Status is used as a search term for the task. Once a task is closed, it will no longer appear on your Task List. If you keep Task History, the task will be transferred into the history when it is closed.

When entering new task, the customer you select may have exceeded his credit limit. In this case, a warning with **Customer Credit Limit Is Exceeded** is displayed.



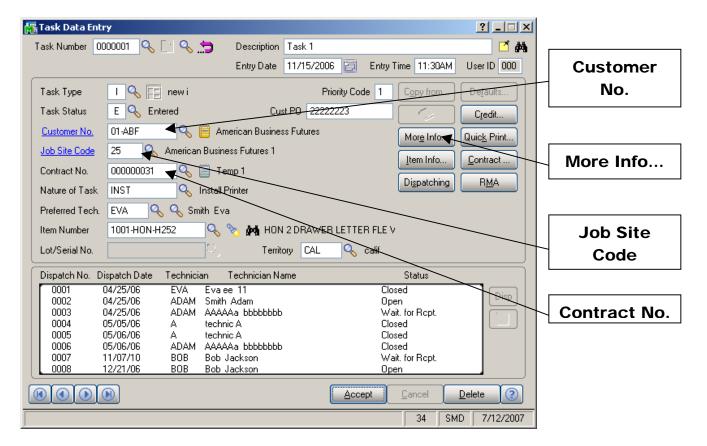


When accepting new task of a type, for which the **Create Additional Task** box is checked in the **Task Type Maintenance**, the program asks if you want to generate additional tasks.

If you click **No**, no additional task will be generated. If you click **Yes**, a message will be displayed with the numbers of generated tasks.

Additional tasks will have all the fields taken from the initial task, except for the Task Type and Description.

If you haven't generated additional tasks when accepting the tasks, you can do that afterwards. Open the task in the **Task Data Entry** screen, and click the **Create Additional Tasks** button. A message will prompt you if you really want to generate the tasks. If you answer Yes, a message will display the numbers of generated tasks.

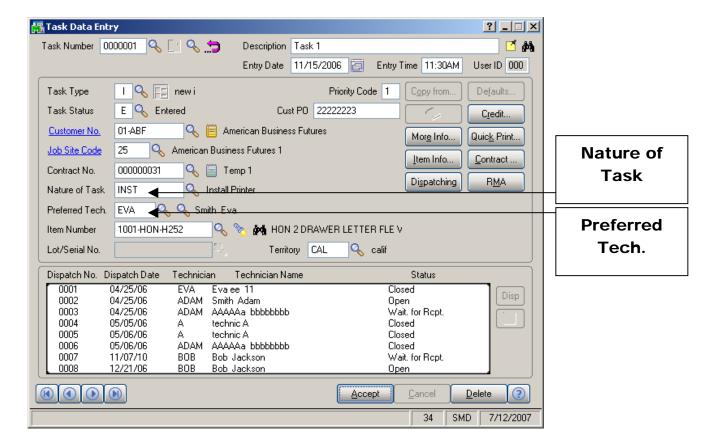


Enter the **Customer Number** for the task.

You may enter the code of the Customer's **Job Site Code** represented by the Customer's Master File Ship-to Address Code. You may see those possible job site addresses by clicking the **More Info** button.

If the **Ship-to Address** has the **Calculate taxes on Labor** option specified, and the corresponding option is set in the **Service Management Options**, the **Tax Class** will be set for each Labor line of Dispatches and replaced to the generated document when closing a Dispatch.

Use the **Contract Number** field to enter contract numbers for the current task. You can select any existing contract using the Lookup button (the Template contracts are not displayed in the lookup). If the **Contract is Required** box in the **Service Management Options** screen has been checked, a contract number for this customer must be entered; otherwise entry in this field is optional. Any revenues or expenses related to this task will be posted to this contract.

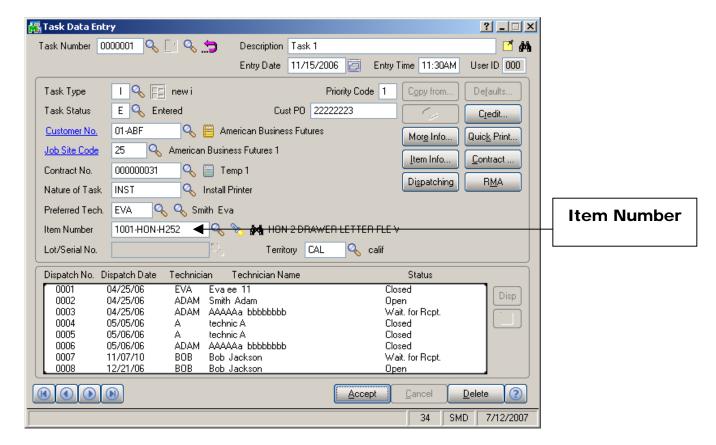


Enter the **Nature of Task**, using a code entered in the **Nature of Task Maintenance** screen. It must be a code corresponding to the Task Type. The **Nature of Task** code you enter is used later when displaying the list of technicians available to be assigned to the task.

You may enter the Code Number for the customer's **Preferred Technician** for this task. By using the Lookup button, you can see those technicians qualified to perform this task based on the Nature of Task's required skills. The Alternate Lookup button displays the list of all the technicians. If the **Nature of Task** has **Technician Code** assigned, it will be loaded when selecting the **Nature of Task**.

If the **Auto Load Technician** box is checked in the **Service Management Options**, the **Preferred Technician** will be automatically loaded in all the Dispatches.

If the **Auto Load Technician** box is cleared, the program will prompt to load the Preferred Technician to the new created Dispatch, while the task has no dispatch for the Preferred Technician.



Enter the **Item Number** reported by the customer identifying the product in need of service.

The program will load the **Response** and **Coverage Codes** from the Item, when it is entered/selected.

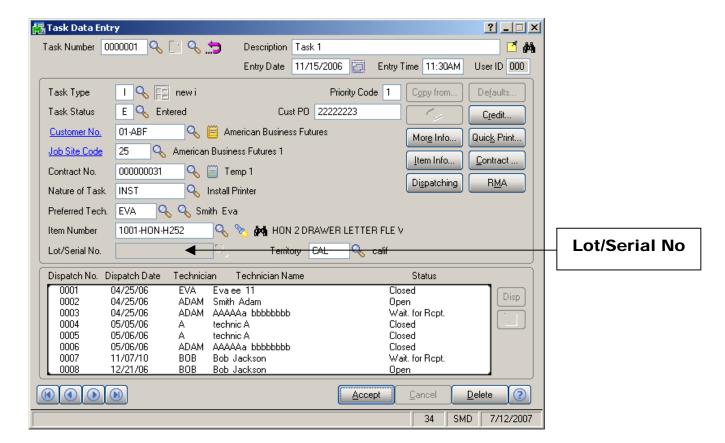
If the Item Number entered is not in the customer's purchase history file, the program will display a prompt.

An item is considered to be on customer's history if it has been sold to him, no matter from SM or SO.

The system should be configured to retain purchase history, to be able to identify sold items.

First, the **Track Customer Site Inventory** option should be selected for the item on the **Options** tab of the **Inventory Maintenance**.

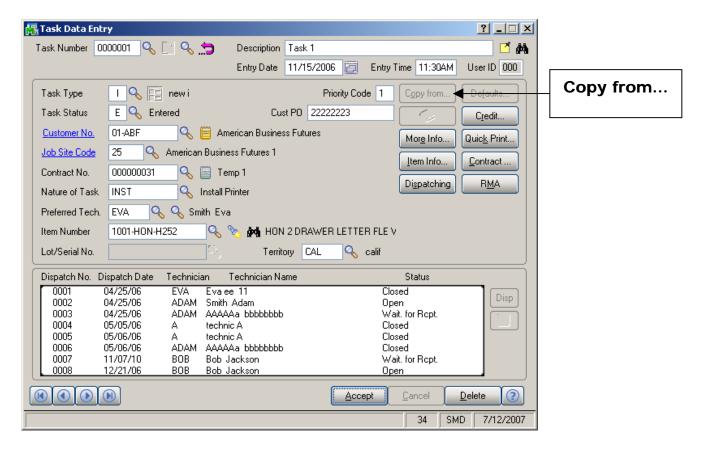
Second, the **Retain Lot/Serial Sales History** option should be set to **Both Lot & Serial Items** on the **History** tab of the **Sales Order Options**, to enable saving history for Lot/Serial items.



If the Item Number entered is stored with options in the **BOM Master File,** the options available are displayed to identify the specific components in need of repair.

If the item reported by the customer has a **Lot/Serial Number**, you may enter it in the corresponding field.

After selecting the customer, the **Territory** field is loaded automatically from the **Customer Maintenance** or **Customer Ship To Address Maintenance** screens. It can also be entered manually for the task.

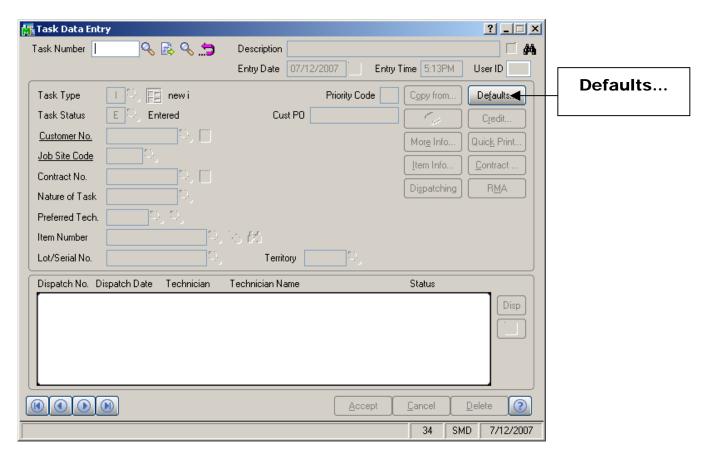


Use the **Copy from** button if you want to copy information from an already existing task into a new one.

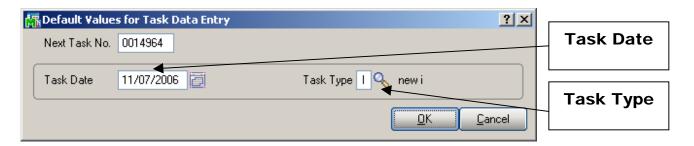
After assigning the next new task number, specify the source task in the following window.

Use the **Lookup** button to select the Task Number. Tasks from **History** can be selected using the **H** button.

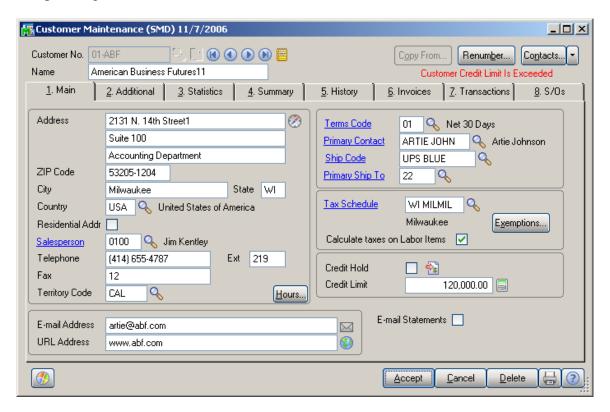


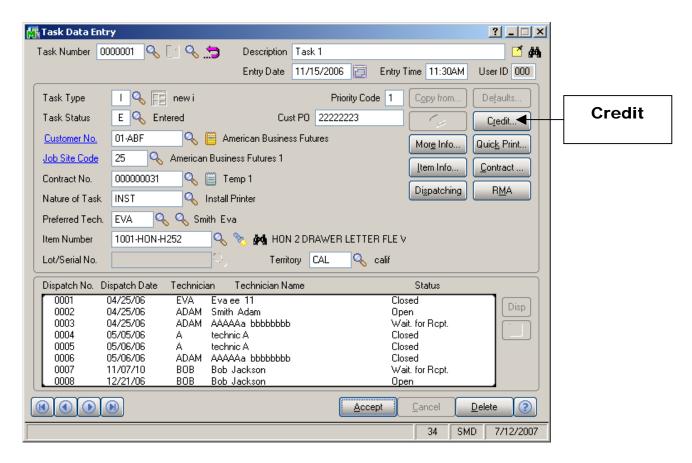


Use the **Defaults** button to enter the **Default Values for Task Data Entry** screen and specify default values like **Task Type** or **Task Date** for the current entry session.

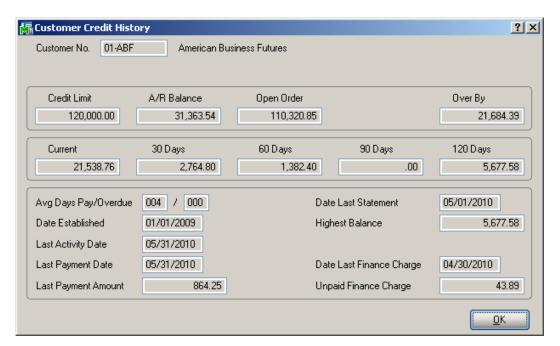


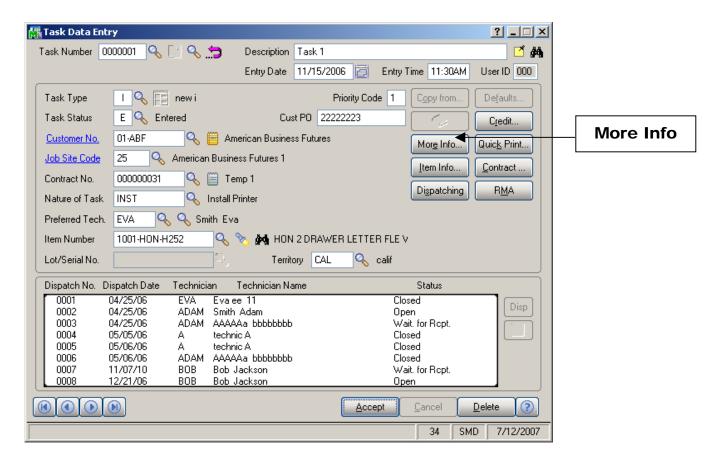
From the **Customer Maintenance** screen you can view the necessary customer-related information as well as make and accept changes to the records.



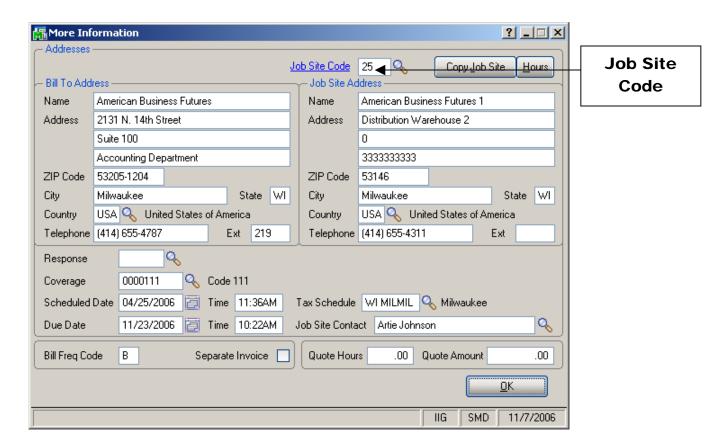


Use the **Credit** button to enter the **Customer Credit History** screen and briefly review credit history.





Click the **More Info** button to view or enter the location for the task entered from the existing Ship-To Location Codes on file for the customer whose number you have entered.



You can enter new **Job Site Codes** and necessary address information or changes, and then save the data as a customer's new **Ship To Code**.

Select the **Response** code to specify the number of hours for accomplishing the task. You can use the Lookup button to list available Response codes.

Select the **Coverage** code to specify the coverage hours for each weekday. Use Lookup button to list the available Coverage codes.

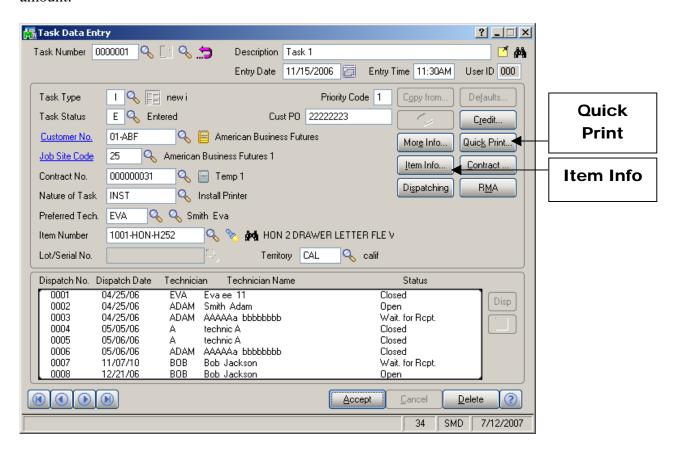
Enter the **Scheduled Date/Time** of the task start.

The **Due Date/Time** of the task will be calculated automatically based on the entered Scheduled Date/Time, Response and Coverage codes.

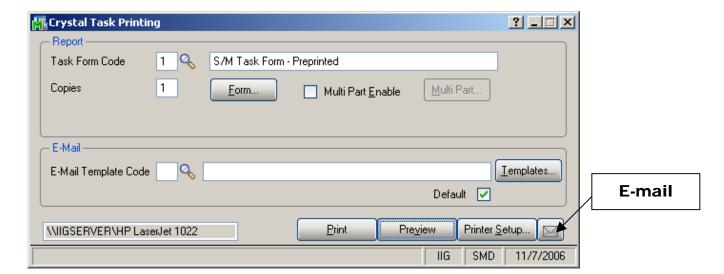
**Bill Freq Code** denotes a scheme of Billing Frequency. The code is displayed as it is set for a customer, and can be changed if needed.

Check the **Separate Invoice** box, if you want separate invoices generated for each task during Auto Invoice Generation.

Enter **Quote Hours** and **Quote Amount** for the task. If entered, the difference between these quotas and already spent hours and amounts will be displayed in the **Labor Charge Data Entry** screen as **Unused** quote hours and amount.



Click the **Quick Print** button to print a report on the task using **Crystal Task Printing**.

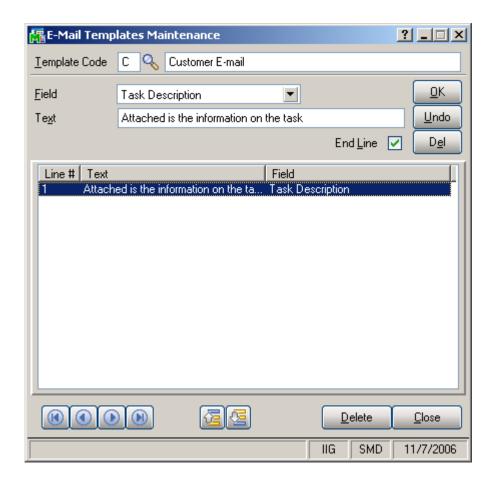


You can e-mail a copy of the report to the customer directly from this screen clicking the **E-mail** button. The program will use Microsoft Outlook to send the mail.

If both Customer and Technician have e-mail address set, a message will be displayed asking to whom the e-mail should be send.

You can have multiple E-mail Templates for the text included in the e-mail body. In the **E-Mail Template Code** field, select the template. The **Default** check box indicates which Template comes selected when the **Crystal Task Printing**. You can leave the **E-Mail Template Code** blank, to send e-mail with blank body (no text, only attachment). Empty Template Code can also be set as Default. The setting of the Default will be saved only after the e-mail is sent.

The E-Mail Templates can be created and edited by clicking the **Templates...** button.



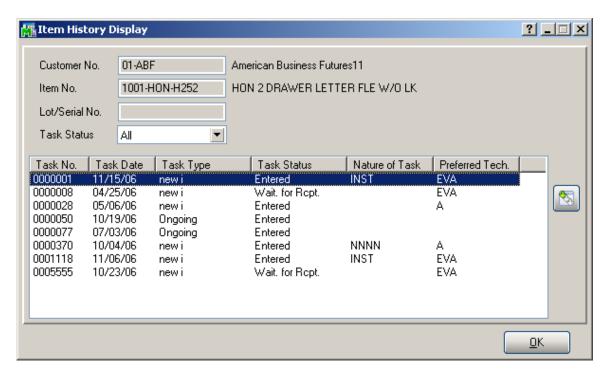
For the selected **Template Code**, select which field's value you want to add to the current line from the **Field** drop-down list. If you haven't entered Text for that field yet, clicking in the **Text** field will bring the name of the selected Field, which you can edit then.

You can add lines containing only Field (no Text), only Text (no Field), or completely empty lines.

By default, all the lines contain one Field at most, with one portion of Text only. To have more than one Text-Field pair in the same line, clear the **End Line** check boxes for all the lines to be merged, except for the last one.

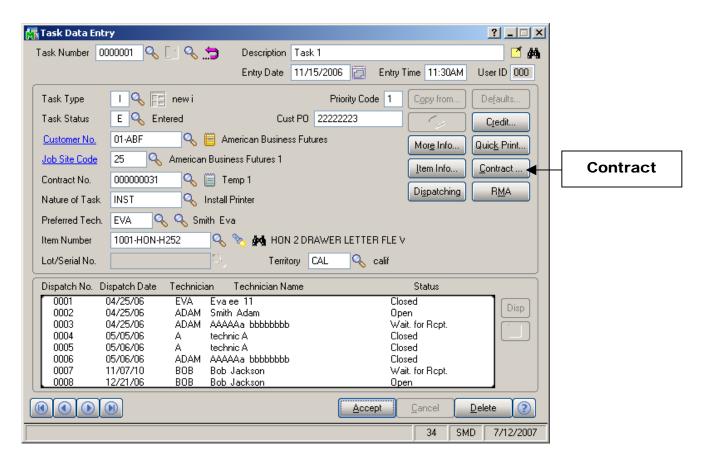
You can arrange lines with the help of the **Move Up** and **Move Down** buttons.

If the **Item Info...** field on the **Task Data Entry** screen contains any number, the **Item Info** button allows you to open the **Item History Display** screen displaying the previous tasks performed for this item.

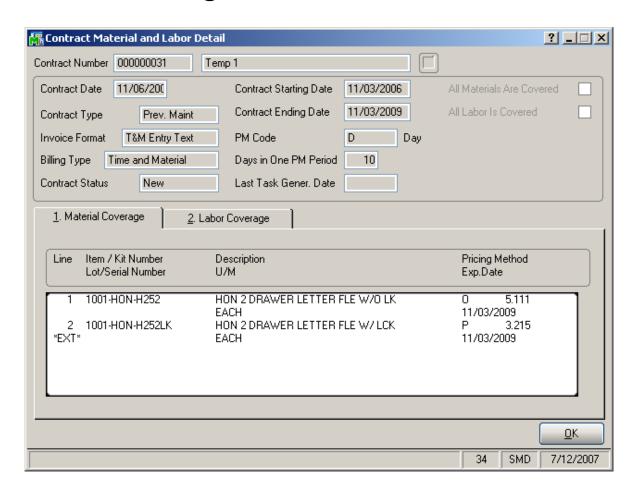


From the **Task Status** drop-down box, select if you want to view **All**, **Non Closed**, or **Closed** tasks.

The **Task Zoom** button displays **Task Inquiry** for the selected Active tasks (Non Closed Statuses) and **Task History Inquiry** for the selected Closed tasks.



Click the **Contract** button to display the **Contract Material** and **Labor Detail** screen with information on Material and Labor coverage.





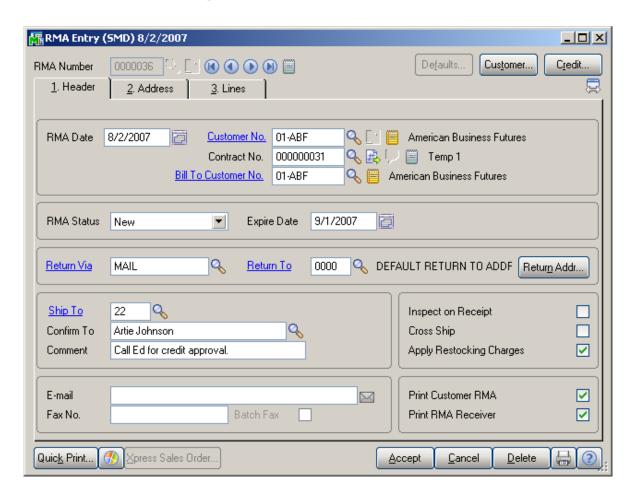
Click the **RMA** button to create new RMA entry directly from the **Task Data Entry** screen.

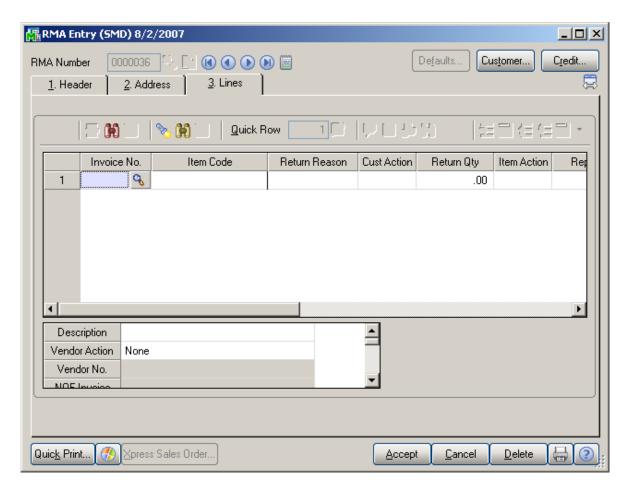
The **Return Merchandise Authorization Entry** screen is opened with the **Next RMA Number** automatically selected.

The **Customer No.** is loaded from the Task.

If the Task has an **Item** assigned, the item information goes to the **Lines** tab of the RMA Entry. When clicking the **Lines** tab, the item of the task is already selected. Select an invoice, make necessary changes to other fields, and accept the line.

After opening the **Return Merchandise Authorization Entry** screen, the **Task Data Entry** program runs independently. You can leave the **RMA Entry** program running and continue working with your tasks.

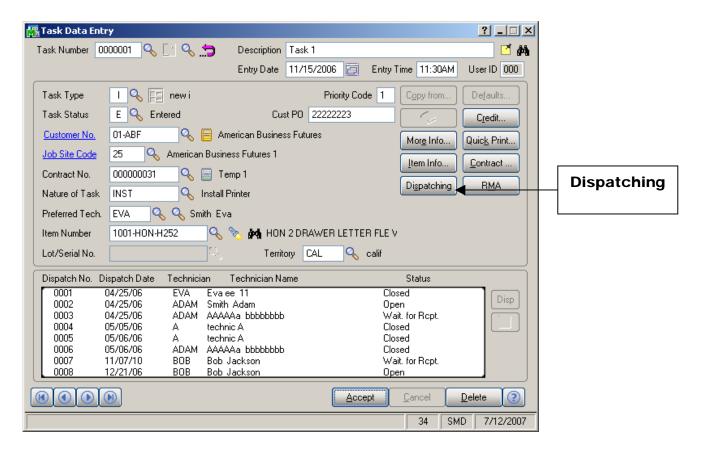




If the standard MAS 90's **Bill of Materials** module is not used (not installed or not activated), the Service Management's Bill of Material will be used in the RMA.

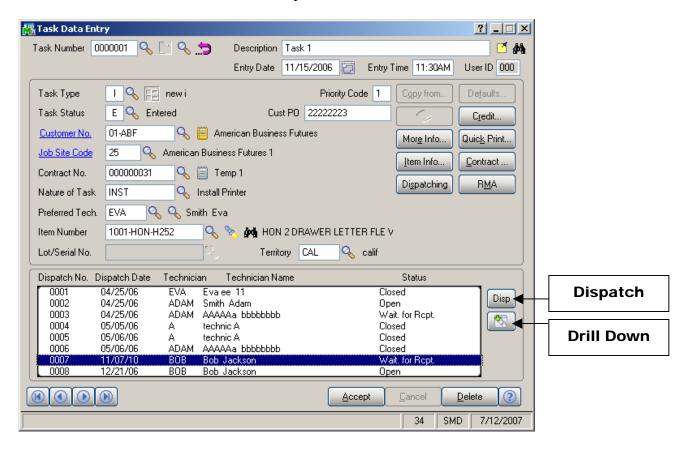
If the item is to generate tasks when generating a Sales Order, the task will be generated when generating Sales Order from the RMA.

Sales Order is generated for the **Cross Ship** items (the **CS** box checked when selecting the line) at the moment the **Accept** button is clicked. For the items not specified as Cross Ship, the Sales Order (and tasks, if needed) will be generated when running the **Generate Transactions** program from the **Return Merchandise Authorization Main** menu. Sales Orders can be generated for the lines marked as Cross Ship using the **Xpress Sales Order...** button. In this case, the tasks to be generated along with the Sales Order, will be automatically generated, too.



Use the **Dispatching** button to enter the **Dispatch Data Entry** screen for the selected task. The **Dispatch Data Entry** screen is displayed ready to add a new dispatch to the task. After entering a dispatch, you can continue working with the **Dispatch Data Entry** as usually.

The lower part of the **Task Data Entry** screen will show all the dispatches previously entered for this task. Information on that screen will reflect dispatch numbers, dispatch dates, technician codes, technician names and dispatch status.

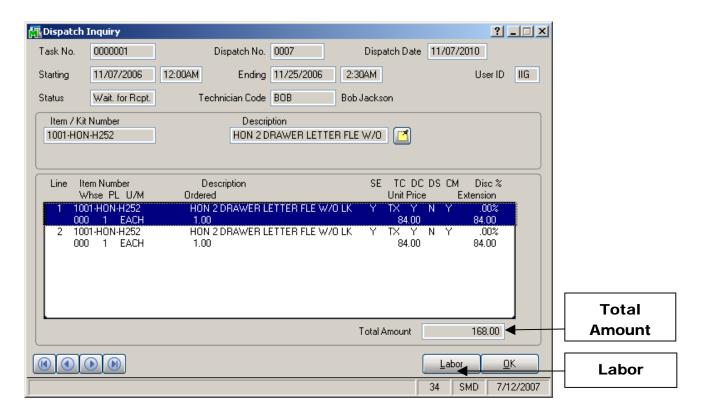


Clicking the **Disp** (Dispatch) button displays the selected dispatch in the **Dispatch Data Entry** screen.

Clicking the **Drill Down** button displays the selected dispatch in the **Dispatch Inquiry** screen.

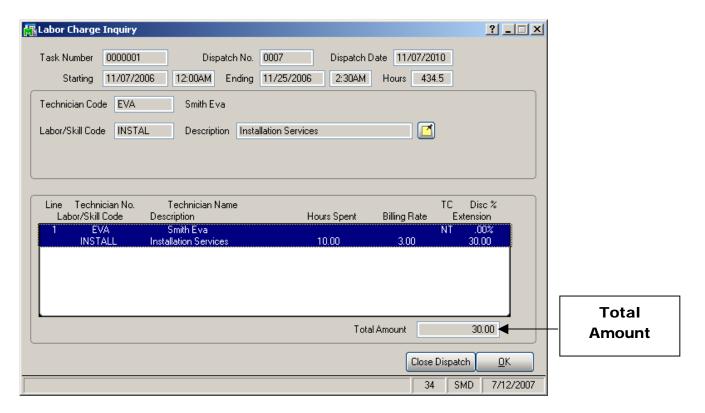
If the dispatch doesn't have material items to be displayed in the **Dispatch Inquiry** screen, the **Labor Charge Inquiry** screen is displayed directly, instead of the **Dispatch Inquiry** screen, when the **Drill Down** button is clicked.

Double-clicking a dispatch line displays the **Dispatch Inquiry** screen if the **Status** of the selected dispatch is **Closed**, and the **Dispatch Data Entry** for all the other statuses.



Material items used on the dispatch are displayed. The **Total Amount** reflects material items only.

Use the **Labor** button to view **Labor Charge** information.

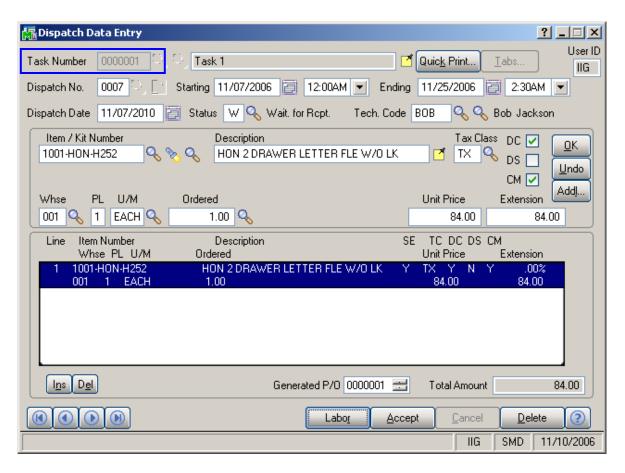


The **Total Amount** reflects labor charges only.

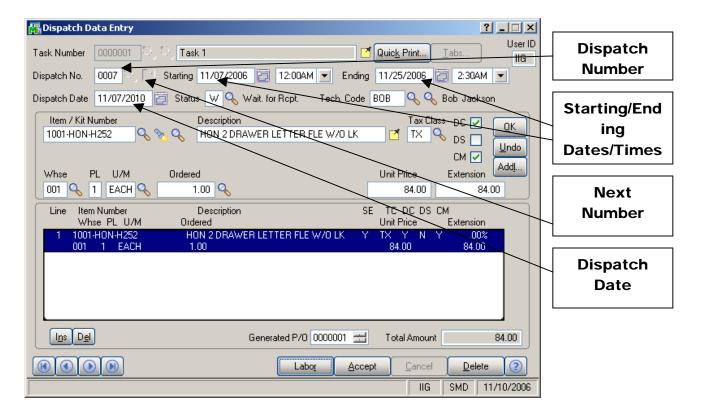
# Dispatch Data Entry

The **Dispatch Data Entry** program is used:

- 1. To dispatch the tasks entered for a technician.
- 2. For control of the overall process, by closing *the dispatch* and *the task* when completed.
- 3. To enter billing information a sales order or an invoice must be created for *services rendered*.



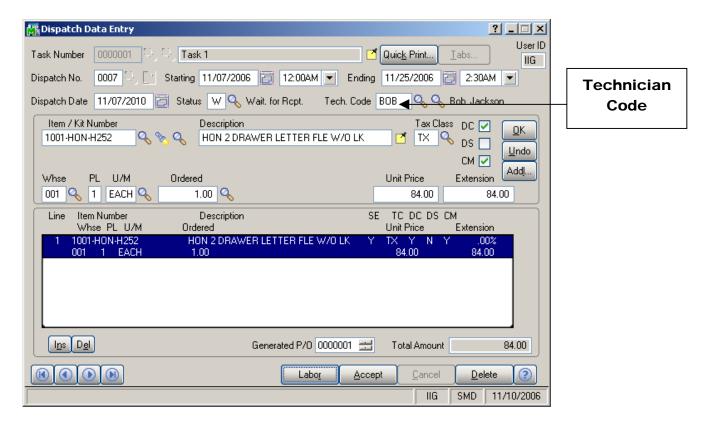
Enter the **Task Number** to be dispatched. The Task Number, Dispatch Number, and Technician Code, if specified, will be loaded automatically when the **Dispatch Data Entry** program is accessed from the **Task Entry** program. In addition, the Dispatch Date and Starting/Ending Dates and Times will be defaulted to the current date and time. If the type of the Contract assigned to the Task is Fixed Period, then the Dispatch Starting/Ending Dates are checked against the Contract Dates.



Enter the **Dispatch Number** to be maintained. If creating a new dispatch, use the **Next Number** icon to accept the next new Dispatch Number for this task, which Service Management will increment automatically.

Enter the desired **Dispatch Entry Date** or press "Enter."

When available, enter the **Starting/Ending Dates/Times** for this dispatch.



Enter the desired **Technician Code** for this dispatch.

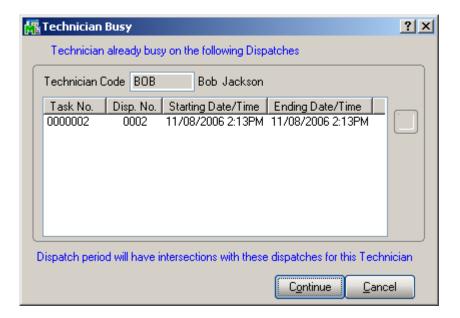
By using the Lookup button, you can see those technicians qualified to perform this task based on the Nature of Task's required skills. The Alternate Lookup button displays the list of all active technicians.

If the **Auto Load Technician** box is checked in the **Service Management Options**, the **Preferred Technician** will be automatically loaded in all the Dispatches.

If the **Auto Load Technician** box is cleared, the program will prompt to load the Preferred Technician to the new created Dispatch, while the task has no dispatch for the Preferred Technician.

If the **No prompt for Technician being busy for the period** box is not checked in the **Service Management Options**, the program will check if the Technician is busy on other active dispatches with intersecting periods each time this Dispatch is accepted.

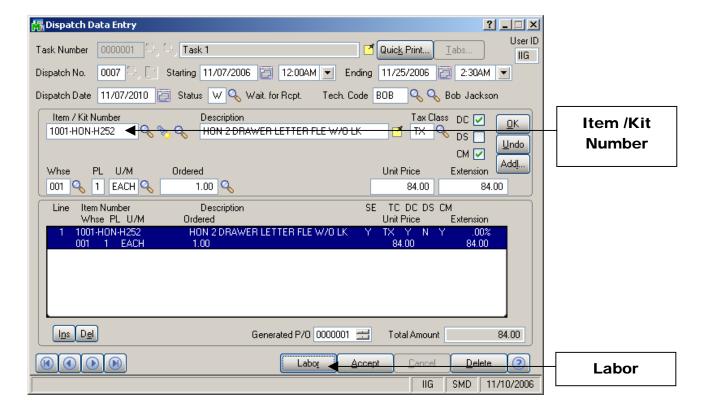
The following screen will be displayed:



The screen lists all the intersecting Dispatches with their Starting and Ending Date/Time.

Click **Continue** to accept the Dispatch despite the intersecting dispatches.

Click **Cancel** to return to the Dispatch Entry screen without saving.

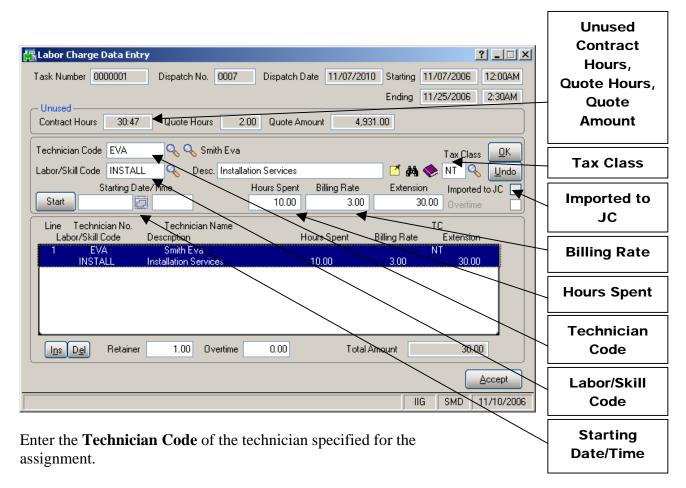


Enter the **Item/Kit Numbers** of the parts and materials that will be used by the technician to perform the dispatched task. The price of the items will be determined by the customer's special pricing or by the terms of a contract (if any) covering this task.

#### Labor Charge Data Entry

Use the **Labor** button at the bottom of the **Dispatch Data Entry** screen to access the **Labor Charge Data Entry** screen.

If the Allow Quote Hours in Task Entry check was set in the Service Management Options, the Quote Hours and Quote Amount fields become visible, displaying the unused hours left from the quote hours of the task and amount remaining from the task quote. If the contract type is Fixed Hours, the Unused Contract Hours displays the unused hours left from the fixed hours of the contract.



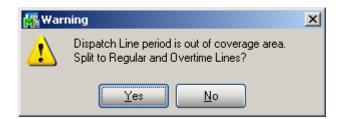
Use the **Labor/Skill Code** field to enter appropriate codes. Use the **Lookup** button to view the list of available labor codes defined in the **Labor Code Maintenance** program. If the user enters "/" in the **Labor Skill Code** field, and then presses the **Lookup** button, it will open a list of available Skill Codes defined in the **Skill Code Maintenance** program.

Click the **Search By Description** button to search for Labor lines in the **Labor Description Search** screen. The search will be performed among all the dispatches in the system. The screen works similar to the **Task** and **Contract Description Search** screens.

The **Starting Date/Time** fields are visible on the **Labor Charge Data Entry** screen, if the **Use Overtime calculation for Labor** box is checked in the **Service Management Options**.

The **Retainer** and **Overtime** fields will be available for the tasks of Fixed Hours contracts, if the **Use Overtime** calculation for Labor box is checked in the **Service Management Options**.

If the period of the line does not completely covered by the coverage area corresponding to the **Coverage Code** of the **Task**, the program will prompt to split the lines:



After splitting, the **Rate** can be recalculated based on the Contract **Apply Rates only during Coverage period** setting. The Overtime line will be checked as **Overtime**.

For the **Fixed Hours** contracts, the hours will be multiplied by the **Retainer Factor** before subtracting from the **Contract Hours**.

The **Hours Spent** field specifies the amount of time spent by the technician to perform the job.

If the contract type is Fixed Hours, and the Quote Amount is over, the **Discount %** will always be 100% (the hours cannot be billed).

The Tax Class field becomes visible if the Calculate taxes on Labor option is set to Labor only or Labor with materials in the Service Management Options, and the Ship-to Address of the Task has the Calculate taxes on Labor box checked. The Tax Class will be defaulted to the one of the selected Labor/Skill Code. If the setting is Labor with material, the Tax Classes of the Dispatch lines will be used only if the Dispatch contains material lines (inventory, miscellaneous, special items). Comments are not considered material lines.

The **Billing Rate** will be determined by the terms of a contract (if any) covering this task. If there is no contract, the rate will be based on the **Billing Rate Calculation Priority** in the **Service Management Options** program,

where the priority of the technician, skill, and labor rates is indicated.

If the **Rate** is changed, it will be used for the selected combination of Technician, Labor/Skill, Customer, and Contract, next time when entering line for that combination.

Click the **Start** button to register start of working at the selected Line. The Start button will be changed to **Finish**. After finishing working at the Line, open the Dispatch and select the Line, then click the **Finish** button. The program will calculate the time between the start and finish of the work and add that time to the **Hours Spent** value. When the work is started (the button is **Finish**), hold the mouse over the button, to view the Start Date/Time in the tool-tip.

The Imported to JC check box has been added to the Labor Charge Data Entry screen. When clicking the labor line on this screen, the Imported to JC will be automatically checked for that line if the service management information of customer numbers, contract numbers, task and dispatch numbers, dates, and labor codes have been already processed and loaded to the Job Posting Entry screen. This option prevents from duplicate processing and loading of the same information. In order to import the information of customer number, contract numbers, task and dispatch numbers, dates, and labor codes again, the Import to JC check box should be cleared for the particular Labor line.

## Reservation Dispatch

If you have used the Status Code **R** before, keep in mind that this Code will be now used for generating **Reservation Sales Orders**. Existing in the system dispatches with the **R** Status **Code** will not be affected; moreover, you can assign the **R** status to other dispatches without generating Reservation Sales Order, in which case the status will remain having the same meaning as before latest installation. All you will have to do is answer **No** each time the program prompts to generate Sales Order, if you do not want to use this status as Reservation.

We recommend creating new status with a different Status Code to be used for the same purpose as you have used the R Code. After that, delete the old R status code. The Reservation status will be created after installing Service Management at the moment you open and close the **Technician Code Maintenance** program.

Select **R** in the **Dispatch Status** field, to generate reservation sales order for the material lines of the dispatch.

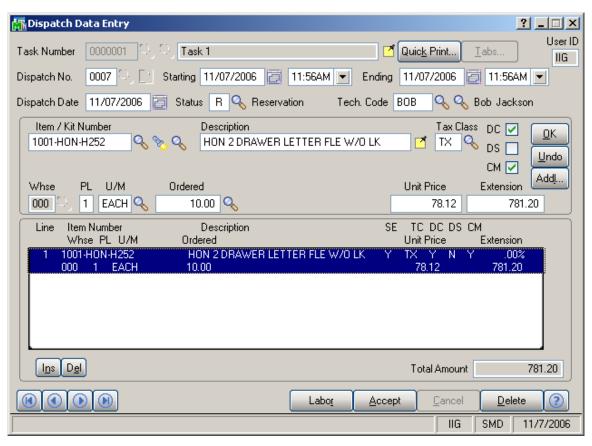
Labor/Skill lines (from the **Labor Charge Data Entry** screen) are not included in the Reservation.

If the dispatch does not have any inventory lines, its Status cannot be set to **Reservation**.

When the Reservation status is selected, the program asks for confirmation to generate Reservation Sales Order.

After clicking **Yes**, the number of generated Sales Order will be displayed.

The number of the generated Sales Order will be displayed at the bottom of the **Dispatch Data Entry** screen:



The generated Sales Order should not be edited to ensure correct processing. The warning is displayed when opening generated Sales Orders.

When a Reservation dispatch is closed, the program prompts to generate an invoice. The generation document cannot be changed to Sales Order, for Reservation dispatches. The dispatch cannot be closed into an existing invoice, either. Only new Invoice can be generated. The generated invoice will be linked to the generated Reservation sales order.

The following rules apply to the generation of invoices for Reservation dispatches.

Lot/Serial items are backordered in the invoice and should be shipped manually and distributed before updating the invoice.

Other items are shipped completely, if not changed in the dispatch after generating the sales order.

If item number or warehouse has been changed on the line of the dispatch, or deleted the initial line of the sales order is moved to the invoice with both shipped and backordered quantities equal to 0. New line is added to the invoice with the new item or warehouse.

If lot/serial item quantity has been changed, both shipped and backordered quantities are set equal to 0 in the invoice. If only the ordered quantity of the dispatch line has been changed, the ordered quantity of that line in the invoice is set equal to the changed quantity in the dispatch.

If the generated sales order has been invoiced manually, the following message will be displayed when closing the dispatch.



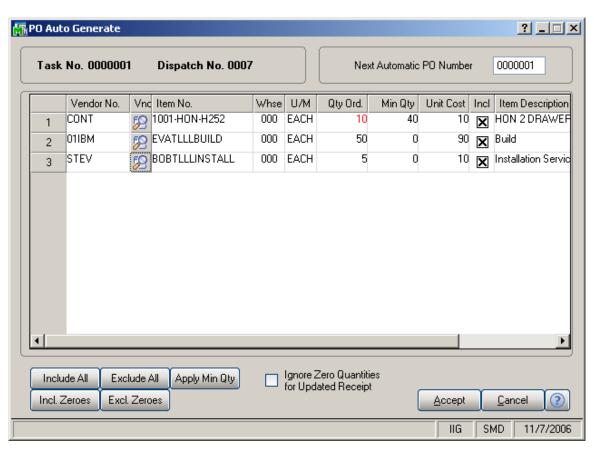
The status of the dispatch can be changed from Reservation to another status without losing the link with the generated Sales Order.

Changing status again to Reservation clears the previously generated sales order information and generates new sales order.

### Waiting for Receipt

Select "W" in the **Dispatch Status** field, if you wish to automatically generate purchase orders for the items and labor on the dispatch.

Line information entered in the **Labor Charges Entry** screen (Technician Code, Labor/Skill Code) will be transformed into an item, if the **Labor Billing Presentation** is set to **Inventory Item** on the **Labor/Item** tab of the **Service Management Options** program.



You may select the items to appear on the automatically generated purchase orders. The vendor is defaulted to the

item's **Primary Vendor** found in the **Inventory Maintenance** screen, but may be changed.

The **Min Qty** column displays the **Minimum Order Quantity** specified for the item and the warehouse in the **Inventory Maintenance**.

The **Quantity Ordered** is displayed in red, if less than the **Minimum Quantity**.

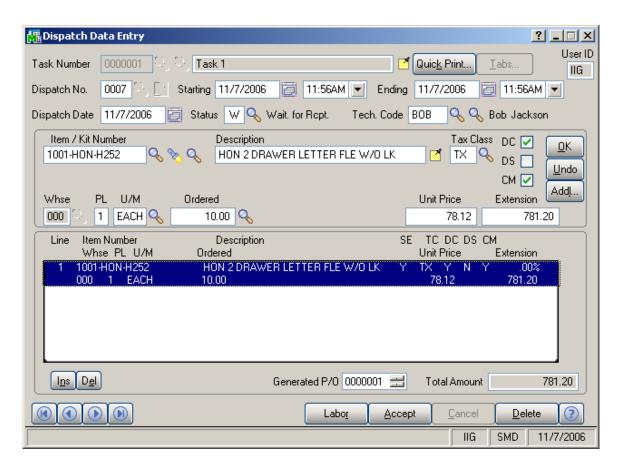
To make all the red **Quantities Ordered** equal to corresponding **Minimum Quantities**, click the **Apply Min Qty** button.

The **Quantities Ordered** may be also changed manually.

You can **Include Zeroes** or **Exclude Zeroes** for the lines with zero ordered quantities.

Check the **Ignore Zero Quantities for Updated Receipt** box to have the **Updated Receipt** status set for the Dispatch if all the non-zero lines of the generated Purchase Orders have been completely received, irrespective of those orders having zero-quantity lines (which cannot be received).

Click the **Accept** button to generate POs for the included lines.

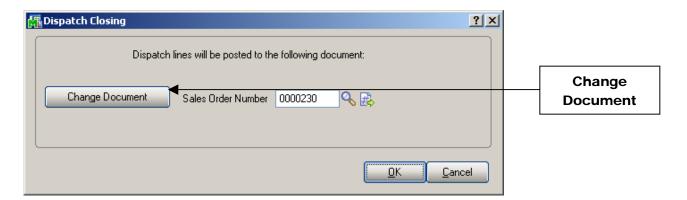


When the items are received in **Receipts of Goods Entry** and updated through the **Receipts Register**, the dispatch status is changed to "**Updated Receipt**".

### Dispatch Closing

For closing the dispatch select C in the **Status** field from the **Dispatch Data Entry** form.

Closing the dispatch will post all the line information to the specified document, i.e., a sales order or invoice. If task has a PO Number specified, its number will also be posted.



You may, if you wish, change the **Type** of document to which this posting will be made, by using the **Change Document** button.

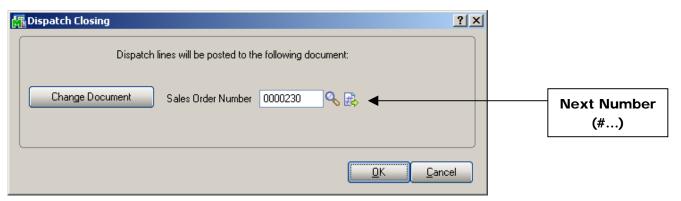
If the task has been generated from a sales order, the number of that sales order will be displayed by default, when the document is set to Sales Order.

You can choose to post the dispatch to any existing sales order or invoice.

When a Reservation dispatch is closed, the program prompts to generate an invoice. The generation document cannot be changed to Sales Order, for Reservation dispatches. The dispatch cannot be closed into an existing invoice, either. Only new Invoice can be generated. The generated invoice will be linked to the generated Reservation sales order.

If the generated sales order has been invoiced manually, the following message is displayed when closing the dispatch.

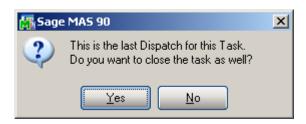




Alternatively, you can assign the next available number by using the **Next Number** icon, and in this case, a new document will be created with all the dispatch numbers listed there.

During the closing of the dispatch, line information entered in the **Labor Charges Entry** screen (Technician Code, Labor/Skill Code) will be transformed into an item (either Inventory, Special or Miscellaneous) according to the settings in the **Service Management Options** screen.

If the dispatch has neither Material nor Labor lines, the following message will be displayed, and the dispatch can be closed without generating any document.

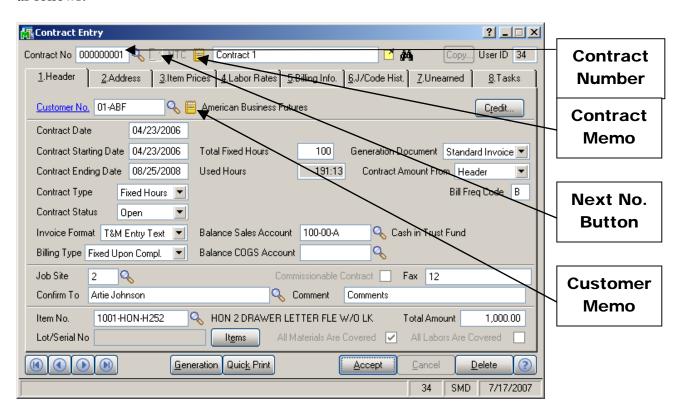


# Contract Maintenance

Use the Contract Maintenance program to enter new or maintain existing contracts and view current contract information.

#### Header Tab

The first tab on the **Contract Entry** screen (**Header**) appears as follows.

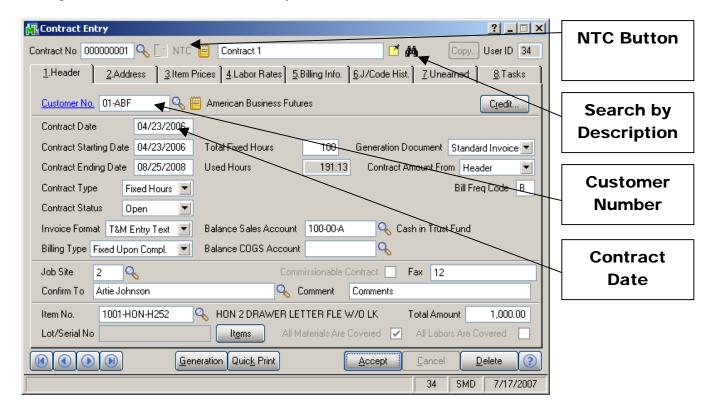


You may enter the **Contract Number** you want to add or maintain manually by typing it into the Contract Number field. Be careful to not enter numbers starting with "T", since system treats them as Template Contracts!

Click the **Contract Memo** button to create or select Memo for current contract.

If you are viewing or modifying existing contracts, use the **Lookup** button, which will display a list of contracts.

If you are adding new contracts, use the **Next Number** button to accept the next new contract number, which Service Management will increment automatically.



Use the NTC Button to accept the next new Template Contract Number. A template contract is used to generate a regular contract whenever a particular item is sold. If you enter a template contract once and then assign it to an item in Inventory Maintenance, the system will automatically set up a contract adhering to the rules of the template for any customer who purchases that item. A template contract number starts with "T". (You can enter the number starting with "T" manually, to create Template Contract.)

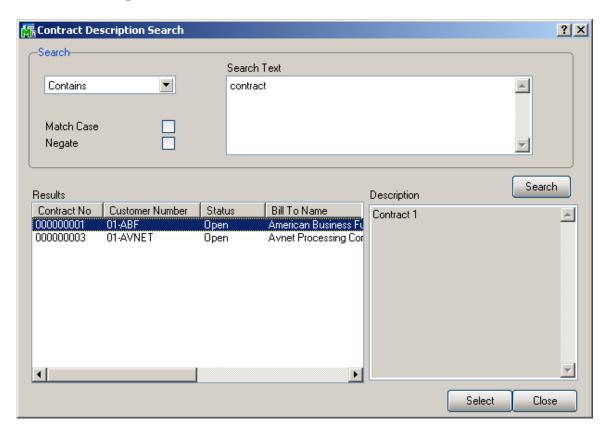
By default, the system assigns the current date to the **Contract Date** field. Enter any other desired contract entry date.

Enter the **Customer Number** for the current contract. If this is a template contract, it doesn't matter which customer number you enter. When the actual contract is generated from the template, the system will automatically create it for the actual customer.

Click the **Customer Memo** button to select Memo for current customer.

Enter the **Description** of the contract. The program allows you to enter an extended description.

Click the **Search By Description** button to open the **Contract Description Search** screen.

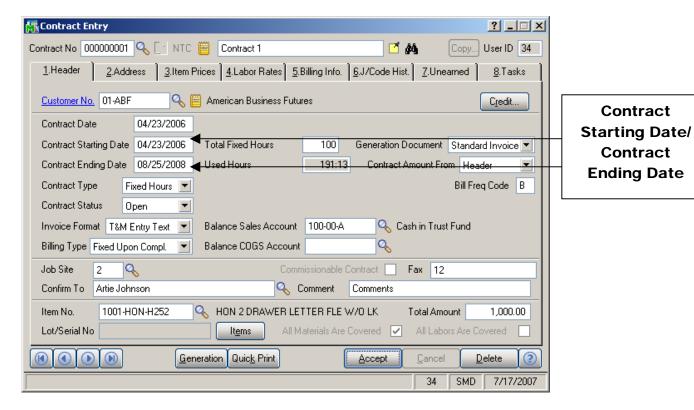


Select the search criteria and enter the Search Text.

Click the **Search** button.

Select a line in the **Results** to view the **Description**.

Double-click the line or highlight it and press Enter, to select the Contract.



By default, the system assigns today's date to both the **Contract Starting** and **Contract Ending Dates**. Enter the desired dates for the contract.

If this is a template contract, the system will use the following dates to generate starting/ending dates for an actual contract:

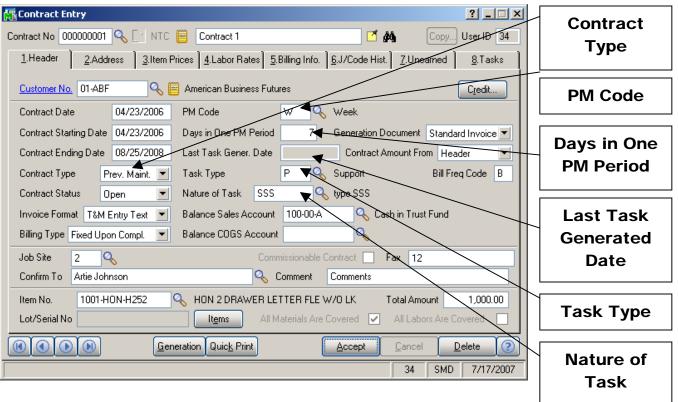
- The actual Contract's Starting Date will be the ship date of the purchased item.
- The actual Contract's Ending Date will be calculated by adding the number of days of the template contract to the ship date of the purchased item.



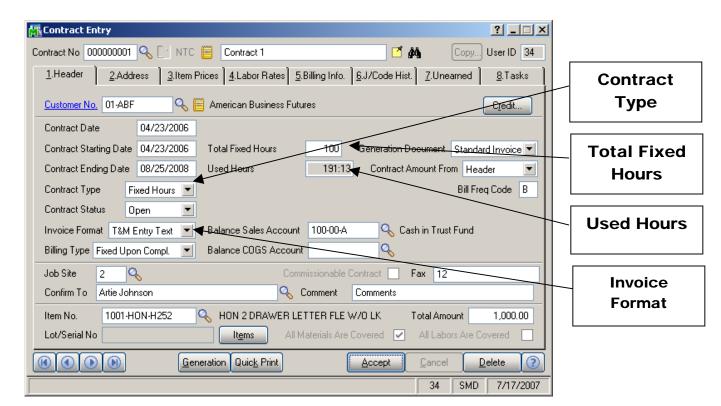
From the dropdown menu, select the **Contract Type**:

- Service
- Preventive Maintenance
- Fixed Hours
- Fixed Period

Depending on the contract type you select, you will be prompted for further data entry.



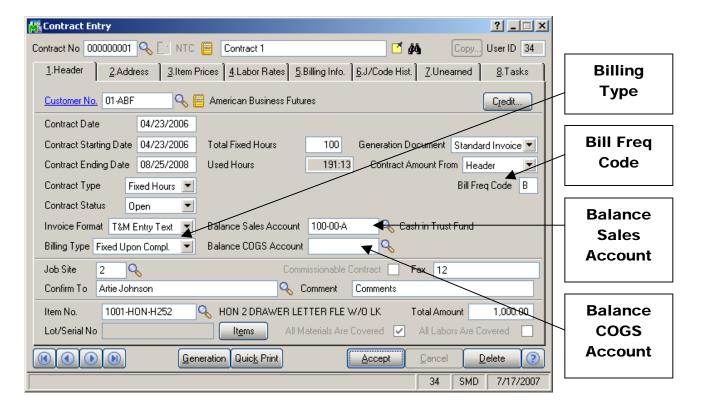
If you select a **Preventive Maintenance** contract, you will be prompted for a **PM Code**. Enter the code describing the frequency with which a PM should be performed. Based on the **PM Code**, MAS 90 will display the **Days in One PM Period**. The system will then utilize the **Days in One PM Period** and the **Last Task Generated Date** fields to automatically generate a preventive maintenance task with the scheduled time set to the appropriate time, when the **Auto Generate Task Selection** program is run. Select the **Task Type** and **Nature of Task** to be assigned to the generated tasks.



If you select a **Fixed Hours** contract, you will be prompted for the **Total Fixed Hours** covered by the contract. As labor hours are charged against the contract, the **Used Hours** field will be accumulated. If you attempt to charge more hours against the contract than were allotted, you will be told that the "Fixed Hours are Expired".

# The **Invoice Format** can be set to **T&M Entry Text** or **Estimate Text**.

When Invoice is generated from Contract, the **Descriptions** of the invoice Labor Representing lines are filled from the corresponding **Labor/Skill Descriptions**, if the **Invoice Format** is **T&M Entry Text**. The **Descriptions** are filled from the **Task Description** (if it exists), instead of Labor/Skill Descriptions, if the **Invoice Format** is **Estimate Text**.



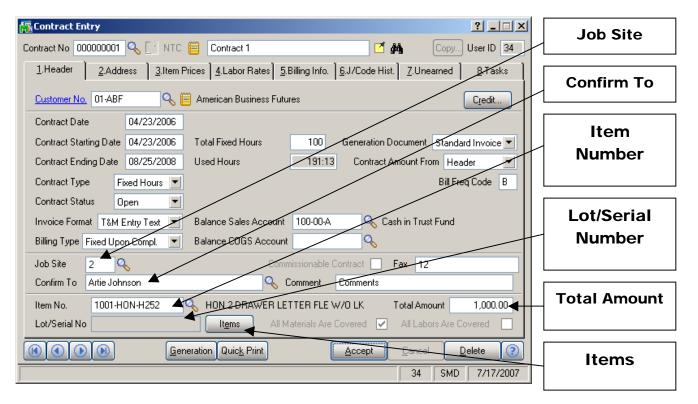
The **Billing Type** field indicates how the contract will be billed. The options are:

- The Time and Material means that the amount will be calculated based on the time spent and material used.
- The Fixed Upon Completion means that the payment will be done in the fixed amount and on completing the work.
- The Fixed Percent Completion means that the payment will be done by percents of completing the work.
- The Fixed On Going means that the payment will be done during the work not more than the fixed amount.

Enter a letter or number for the **Billing Frequency Code** to denote a scheme of Billing Frequency. When selecting customer, the field displays the setting for that customer, which you can change if needed.

Enter the **Balance Sales Account** and **Balance COGS Account** to be used for balancing Special Item generated to balance Invoice Total amount (against Contract Total Amount) when generating invoices with the **Auto Invoice Generation** program from contracts for all the **Fixed Billing** 

**Types** (last three types). If these accounts are not entered on the Contract, the **Sales Account** specified on the **Lines** tab of the **Sales Order Entry** screen will be used.



You may enter the **Code** of the customer's **Job Site** represented by the **Customer's Master File Ship-to Address Code**. You may see those possible job site addresses by accessing Tab 2 – **Address**.

You may enter the appropriate Customer Contact in the **Confirm To** Field.

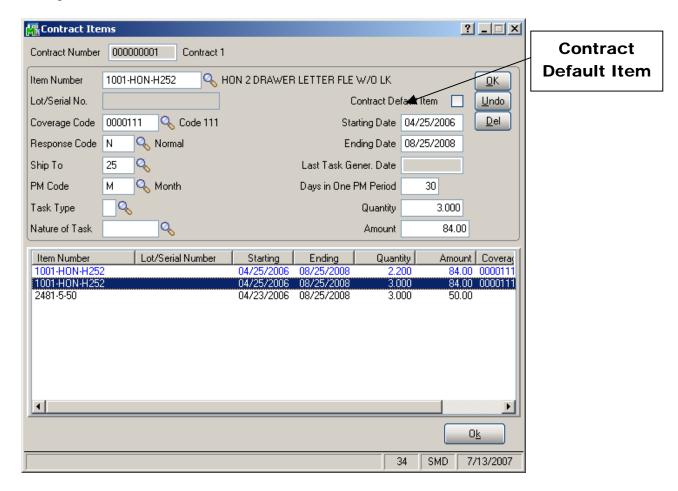
Enter the **Item Number** for the default item covered by the contract.

If the default Item has a **Lot** or **Serial Number**, you may enter it here.

If you are logged on into MAS 90 as a user with Supervisor Rights, you can enter the **Total Amount** paid by the customer for the contract.

The **Items** button displays the following screen with the list of items covered by the contract.

You can have multiple lines of the same item with different settings.



You can add items covered by the contract entering **Item Number** and **Lot/Serial Number** if needed. Also enter **Ending Date**, **Quantity** and **Amount** for the item, and click **Ok** to add the item.

If you want to mark an item as default for the contract, check the **Contract Default** box. The default item is highlighted with blue in the list and is displayed in the **Header** tab of the **Contract Entry** screen.

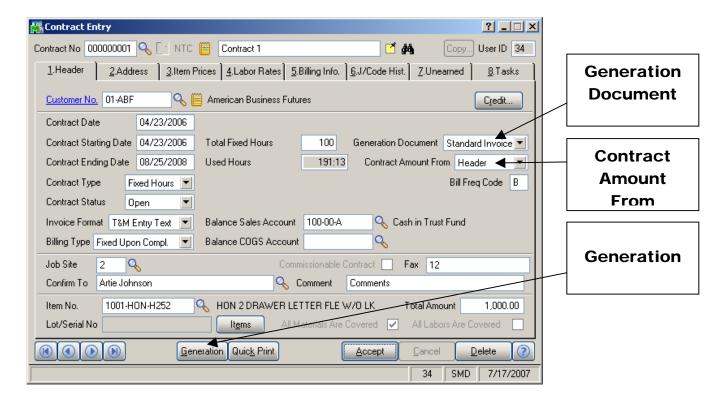
The **Ship To**, **Task Type**, **Nature of Task**, **Coverage**, **Response** fields are loaded in the generated tasks for all the contract items for preventive maintenance contracts, during generation from the **Auto Generate Tasks Selection** program.



For either **Fixed Period Contract** / **Service Contract** Types, you will be told the "Contract is Expired" if you attempt to charge anything against the contract past the Contract Date.

If the All Materials Are Covered / All Labor Is Covered checkboxes are marked, all the materials and labor charges issued against this contract will have zero prices. If there are items and labor charges specified in the appropriate line tabs, they will be considered an exception to this rule. If these checkboxes are left blank, then users have to specify all the items and all the labor charges covered by this contract in the appropriate line entry tabs.

You cannot change settings of these checkboxes if there are lines in the **Item Prices** and **Labor Rates** tabs correspondingly.



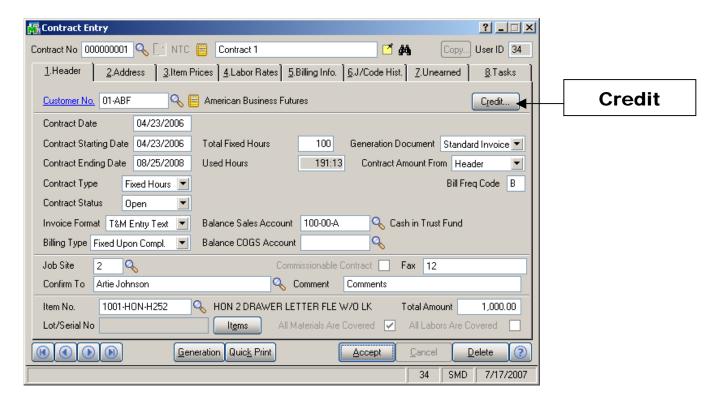
The program enables you to generate an order or invoice from the contract directly from the **Contract Entry** screen.

Select the output document from the **Generation Document** drop-down list. Options are: **Standard Order**, **Price Quote**, **Standard Invoice**, **None**.

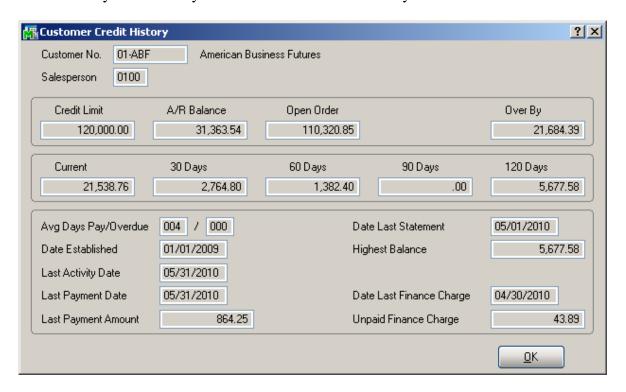
**Contract Amount From**: The amount can be calculated based on the total amount indicated in the **Header** tab of the contract or including the **Items** extensions.

Click the **Generation** button to generate the chosen document. If **Generation Document** is set to None, no document will be generated.

If you do not want to generate documents at the moment, you can do it from the **Service Management Main** menu using **Auto Contract Invoice Generation**.

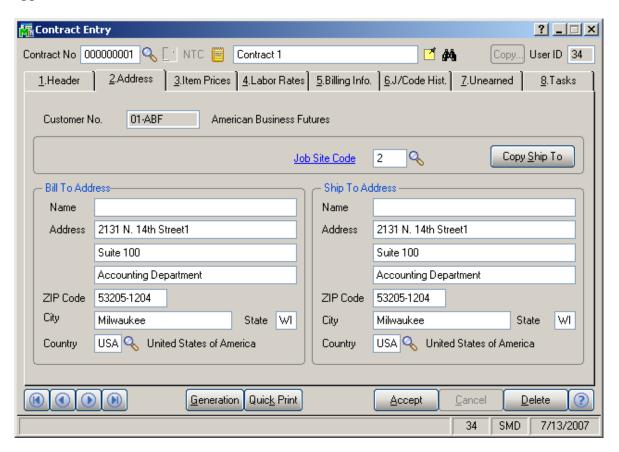


Use the **Credit** button to enter the **Customer Credit History** screen. Here you can briefly review customers' credit history.



## Address Tab

The second tab on the **Contract Entry** screen (**Address**) appears as follows.



Select the **Address** tab to view or enter the job site location entered from the existing **Ship-To Location Codes** on file for the customer whose number you have entered.

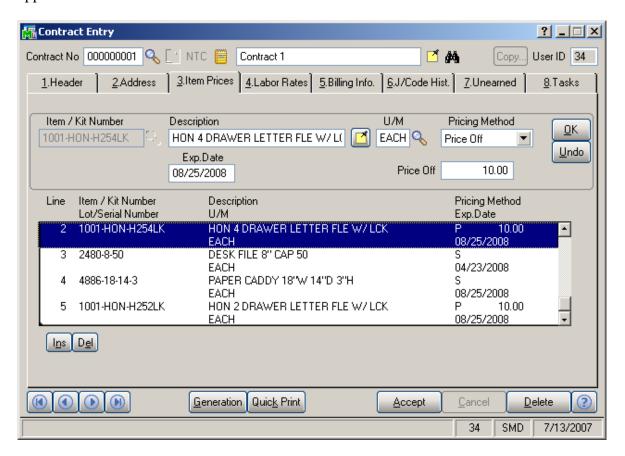
You can enter new job site codes and necessary address information or changes, and then save the data as a customer's new **Ship-To** code. You can do this by clicking "**Yes**" on the following prompt:



The **Customer Ship to Address Maintenance** screen will be displayed with the current information. Review and click **OK** to save the new Ship To Address.

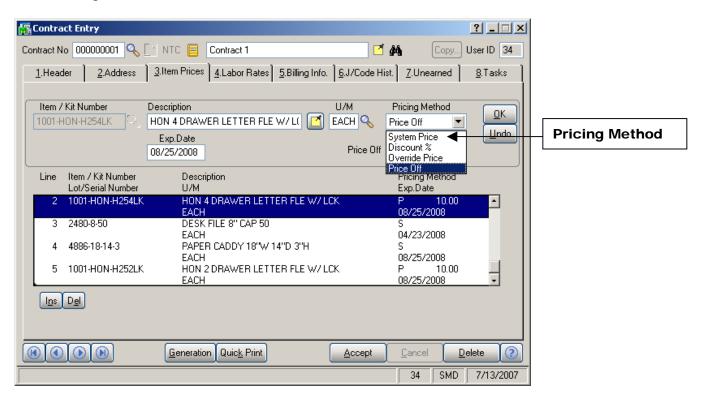
## Item Prices Tab

The third tab on the Contract Entry screen (**Item Prices**) appears as follows:



Use this tab to enter information on all the materials covered by the contract. If the **All Materials Covered** checkbox is selected, this tab will contain information about items not covered by the contract.

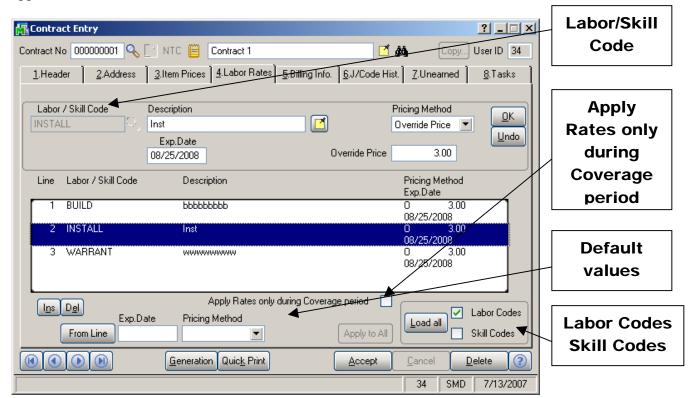
In either case, users have the option of specifying custom pricing information for a given item using the **Pricing**Method dropdown window as shown below.



- **System Price** Standard MAS 90 price will be applied whenever items are sold against this contract.
- **Discount %** User will specify a discount percent, which will be applied to an item's standard price whenever items are sold against this contract.
- Override Price Overridden price will be applied to an item whenever the item is sold against this contract.
- **Price Off** Amount specified will be taken off the item's standard price.

## Labor Rates Tab

The forth tab on the **Contract Entry** screen (**Labor Rates**) appears as follows:



Use this tab to enter information on all the labor charges covered by the contract. If the checkbox "All Labor Charges Covered" is checked in the first tab, this tab will contain information about items not covered by the contract.

Use the **Labor/Skill Code** field to enter appropriate codes. Use the **Lookup** button to view the list of available labor codes defined in the **Labor Code Maintenance** program. If the user enters "/" at the **Labor/Skill Code** field, and then clicks the **Lookup** button, it will open a list of available skill codes defined in the **Skill Code Maintenance** program.

**Pricing Method** for Labor Charges works exactly as it does on the **Item Prices** tab.

Check the **Apply Rates only during Coverage period** box to not apply the Labor Rates listed for the Labor lines not falling into the Coverage area.

The **Default values** group enables changing default values for Labor Rates and buttons for their usage and editing. When opening the **Contract Entry** screen first, the **Exp. Date** and **Pricing Method** fields are empty, and the value field is correspondingly hidden.

Once any of these fields is edited, the current values become default, and the **Apply to All** button is enabled. Clicking the **Apply to All** button applies the current values to all the existing labor lines. Any new line being entered will load the default values.

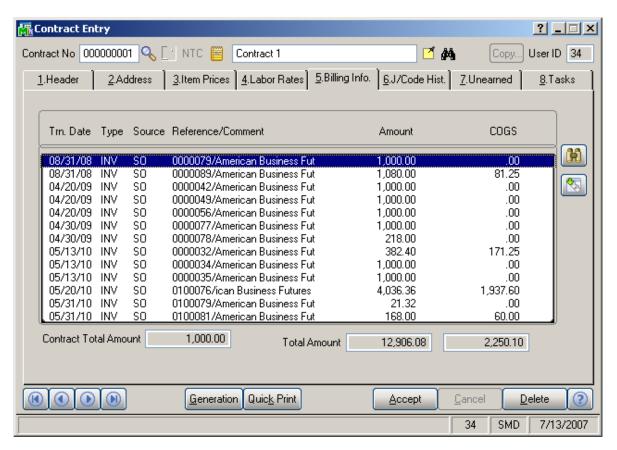
The **Exp. Date** or **Pricing Method** field can be left empty, in which case the program will not change values of this field in the existing lines.

When a line is selected, or new line is being entered, the **From Line** button is enabled. Clicking the **From Line** button loads the values being edited into the default fields.

When **Labor Codes** and **Skill Codes** are checked, all labor codes and skill codes will be selected for loading. Click the **Load all** button for entering all selected Labor/Skill Codes.

## **Billing Information Tab**

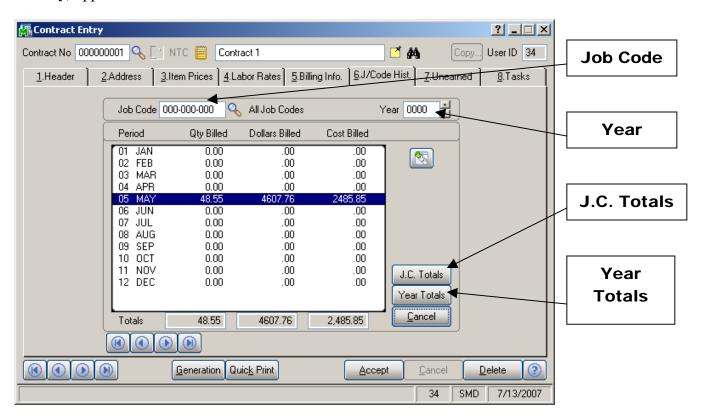
The fifth tab on the Contract Entry Screen (**Billing Info.**) appears as follows:



This tab will show all the invoices billed against the current contract.

## J/Code History Tab

The sixth tab on the **Contact Entry** screen (**Job Code History**) appears as follows:



This tab will display contract history information broken out by Job Code. Whenever a Sales Order or a Sales Order Invoice is processed in MAS 90, and that order or invoice has a contract number specified on it, all the line information will be posted to the Contract File, organized by Job Codes.

Use the **Job Code** entry field to specify the Job Code entries you wish to view.

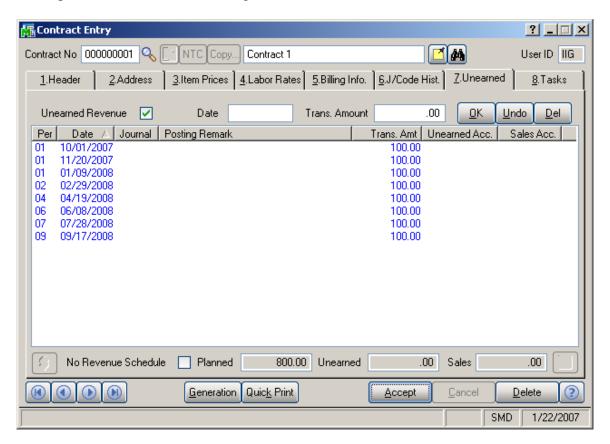
Use the **Year** field to see all the postings for the specified Job Code in that specified year.

Use the **J.C. Totals** button to see total information for all the Job Codes specific to the current contract.

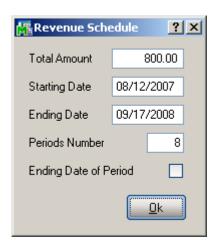
Use the **Year Totals** button to view the postings to a specific job code for all years.

#### **Unearned Tab**

The **Unearned** tab of the **Contract Entry** screen allows user to set amounts and periods of payment during task accomplishment, before task closing.



Checking the **Unearned Revenue** box brings up the following **Revenue Schedule** screen:

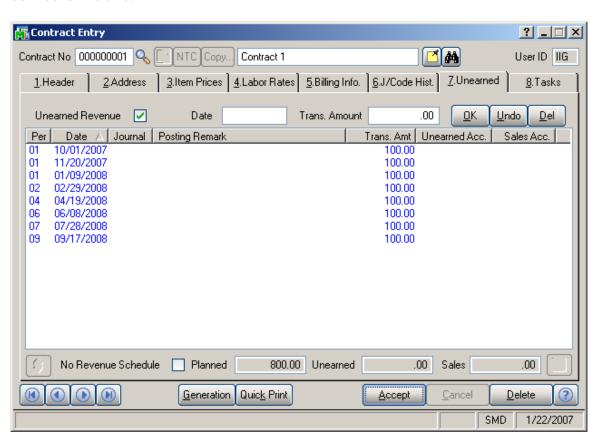


The **Total Amount** is the amount to be paid during the task accomplishment.

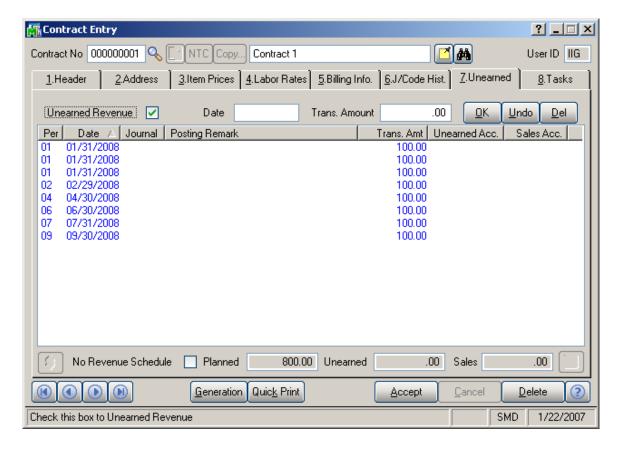
**Period Number** divides the time between the **Starting** and **Ending Dates** into the entered number of periods. The amount will be divided evenly according to this schedule. Check the **Ending Date of Period** box if you want the amounts be paid on the closest Ending Dates of Periods instead of the dates suggested by the schedule. Ending Dates are set in the **Fiscal Year Maintenance** program under the General Ledger Setup menu.

Compare the distributions with and without **Ending Date of Period** box checked.

The schedule without checking the **Ending Date of Period** box looks like this:



And the schedule with the **Ending Date of Period** box checked looks like this:

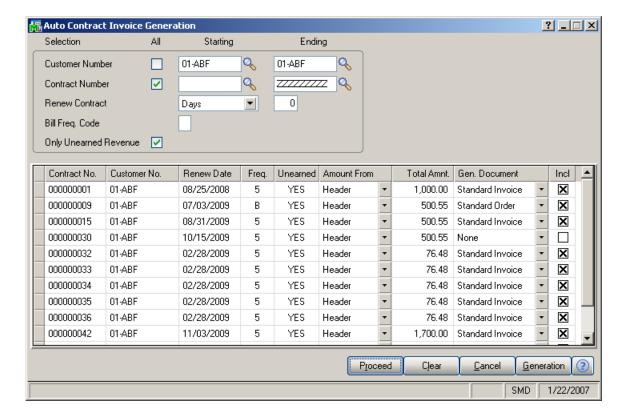


You can add, delete or modify transfer dates and amounts. If you delete all the periods, you can clear and check the Unearned Revenue anew to create new schedule in the Revenue Schedule screen.

**Planned**, **Unearned** and **Sales** amounts are displayed at the bottom of the tab.

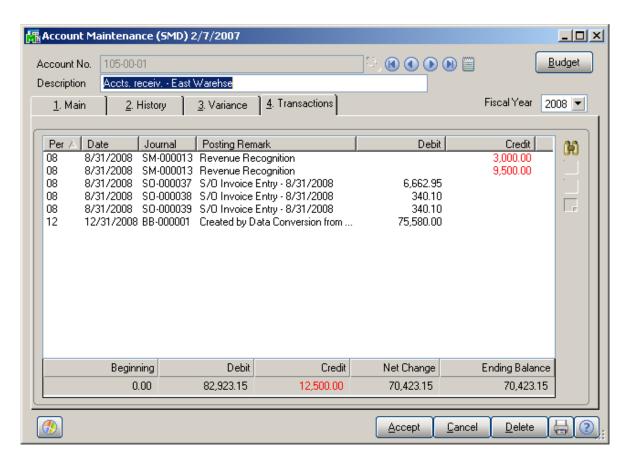
When running Auto Contract Invoice Generation from the Service Management Main menu, or when generating the invoice by clicking the Generate button from the Contract Entry (the Generation Document should be Standard Invoice in the Header tab), the sales account is replaced with the Unearned Revenue account. This account can be set up in the Division Maintenance program in the Accounts Receivable Setup menu. The account will not be replaced when manually creating invoice in the Invoice Data Entry program.



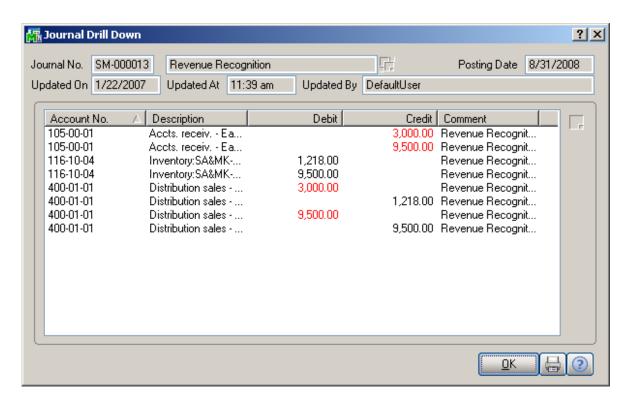


After running **Daily Sales Reports/Updates** from the **Sales Order Main** menu the amount is transferred to the Unearned Revenue account.

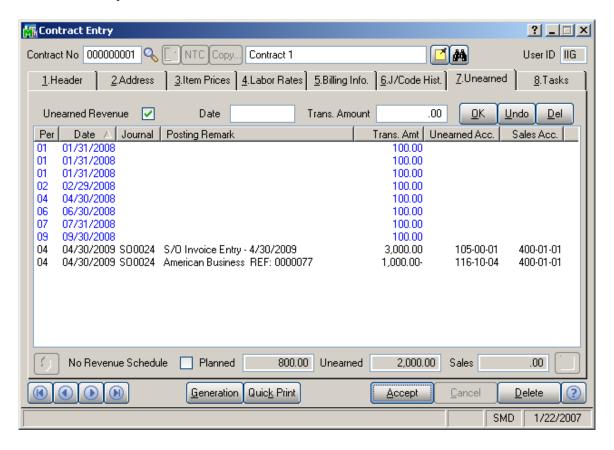
This transaction can be viewed in the **Account Maintenance** program from the **General Ledger Main** menu. Select the account set for the Unearned Revenue, and go to the **Transactions** tab.



Select the last transaction and click the **Journal Zoom** button. Here is the **Journal Drill Down** screen:

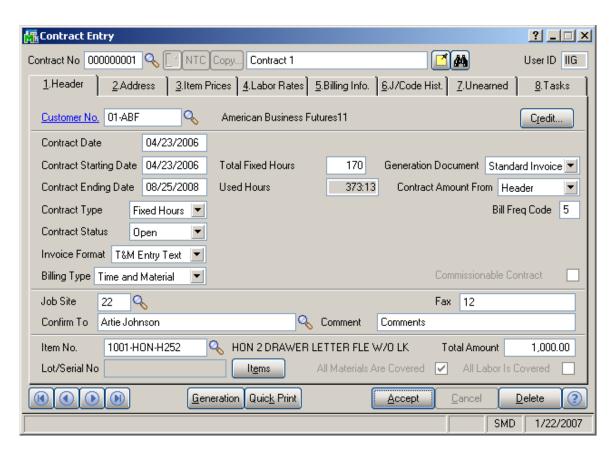


The same transaction can be seen in the **Unearned** tab of the **Contract Entry** screen:

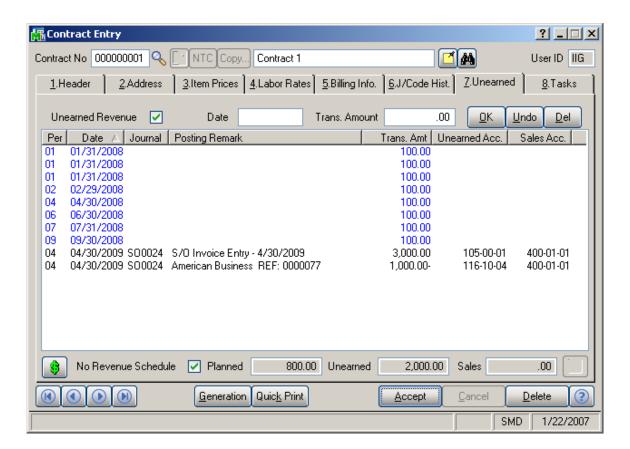


When the **Contract Type** is the **Fixed Hours**, the **No Revenue Schedule** can be checked to postpone the revenue scheduling (the **No Revenue Schedule** and the **Unearned Revenue** should be checked together). The amount and the period of payment during task accomplishment will be set after invoice generation for the current contract.

Select the **Fixed Hours** as a Contract Type in **Contract Entry Header** tab.



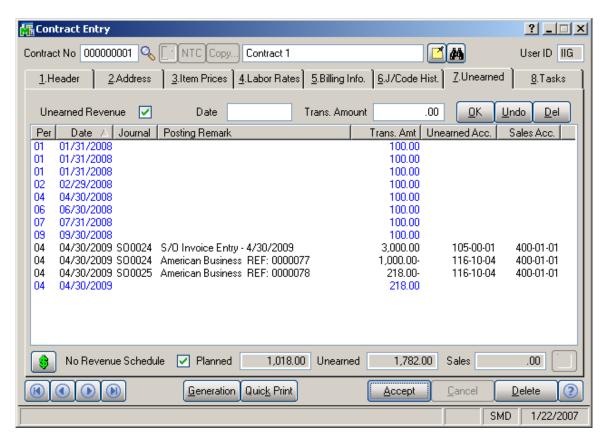
In the Unearned tab, check the No Revenue Schedule.



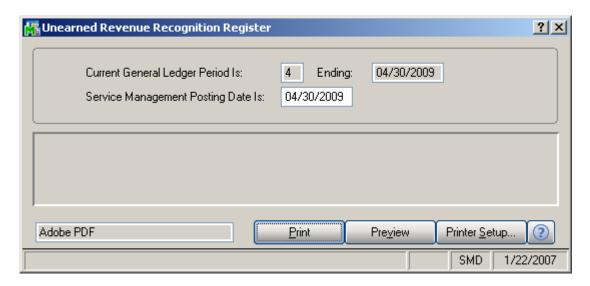
Click the **Generate** button.

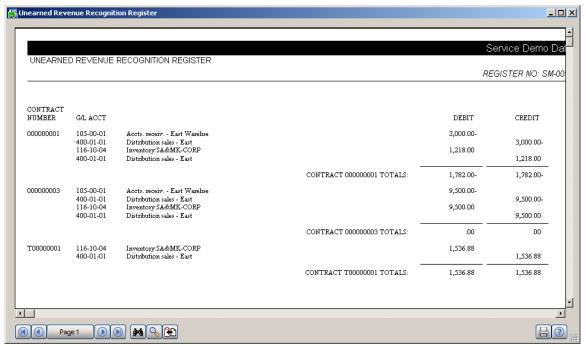
After running **Daily Sales Reports/Updates** from the **Sales Order Main** menu the amount is transferred to the Unearned Revenue account.

The transaction and the new schedule can be seen in the **Unearned** tab of the **Contract Entry** screen:

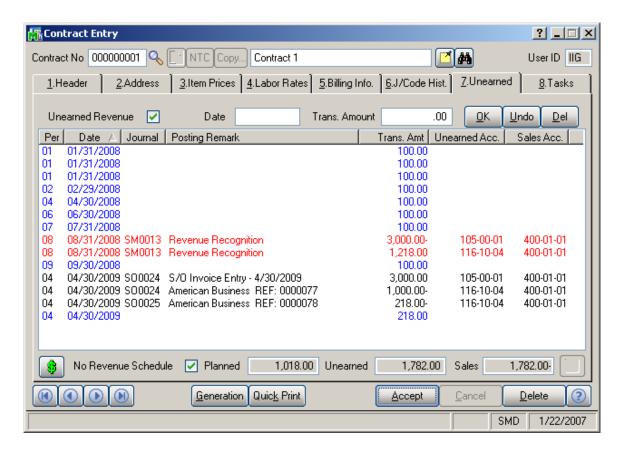


When running the **Unearned Revenue Recognition Register** program from the **Service Management Main**menu, the amount will be transferred to sales account.





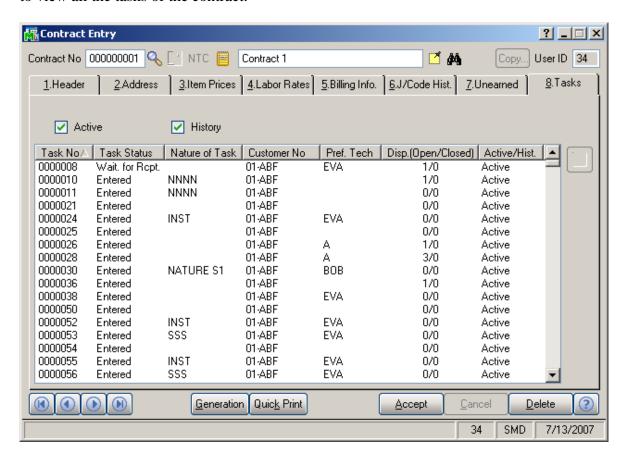
This also can be seen in the **Contract Entry** screen:



All the amounts scheduled by dates before the Posting Date will be recognized, if there is enough invoiced amount. To check if the amount invoiced by the moment of recognition is enough, look at the **Unearned** and **Sales** fields at the bottom of the **Unearned** tab. If the amount of **Unearned** is more than the amount of **Sales**, the difference can be used for revenue recognition.

## Tasks Tab

The **Tasks** tab of the **Contract Entry** screen allows the user to view all the tasks of the contract.



Check the **Active** box to list the active tasks.

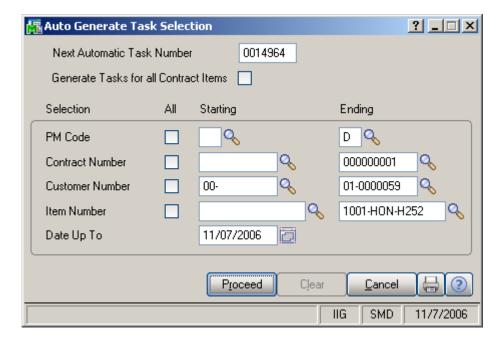
Check the **History** box to list the closed tasks saved in History.

The **Task Zoom** button displays the **Task Inquiry** screen for the selected **Active** task or the **Task History Inquiry** if the task is from **History**.

## Auto Generate Task Selection

The **Auto Generate Task Selection** program can be used to create preventive maintenance tasks based on operator requested criteria.

MAS 90 will locate the preventive maintenance contracts meeting your criteria, utilize the **Days in One PM Period** and **Last Task Generation Date** fields on the contract, and determine whether it is time for another PM to take place.



The new **Generate Tasks for all Contract Items** check box gives choice to generate tasks for either only Contract Default Item or all the Contract Items.

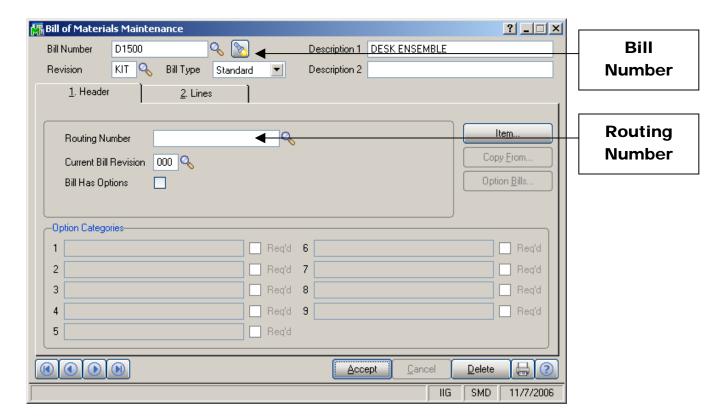
If this check box is cleared, tasks will be generated only for the **Contract Default Item** (displayed on the **Header** tab of the **Contract** screen).

If the box is checked, the program will try to generate tasks for all the items of the contract. The tasks will be generated for the lines that have the PM Code specified and that are to generate tasks based on the date of generation.

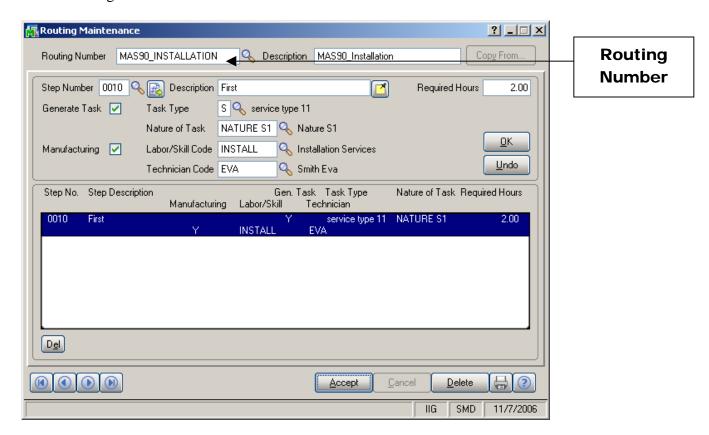
You can select to generate tasks for the contracts in the specified ranges of PM Codes, Contract Numbers, Customer Numbers, Item Numbers.

Auto Task Generation is performed taking into account the following: If the routing has dispatchable steps in it, whenever you process a Sales Order for that item, the system will generate tasks for each dispatchable step.

The item can be defined as a Bill of Materials item:



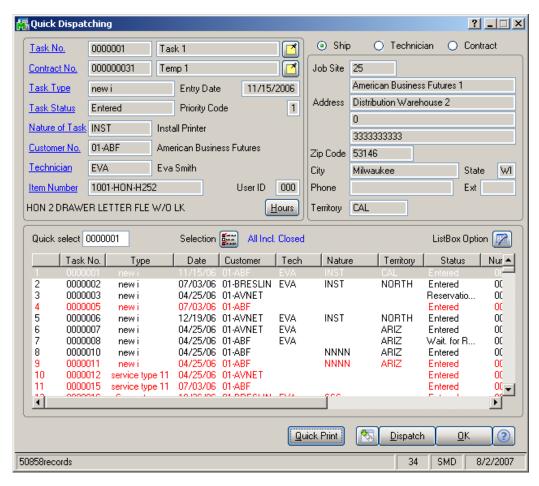
The Bill of Materials (**Bill Number**) can have a **Routing Number** assigned to it:



# Quick Dispatching

The **Quick Dispatching** program can be used to:

- View tasks sorted by all the fields.
- Filter the tasks.
- Quickly assign a Task for dispatch.



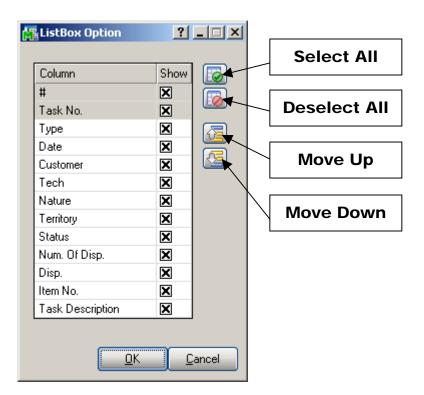
Select a task by clicking on the line. The task information will be displayed in the top part of the screen.

Click the above links to open the corresponding inquiry/maintenances with appropriate codes.

You can view Ship, Technician or Contract information by selecting the corresponding radio button at the right top of the screen.

Specify the number of the Task in the **Quick Select** field to quickly find the corresponding line.

Click the **ListBox Options** button to open the corresponding screen.



Select the field you want to see on the **Quick Dispatching** screen.

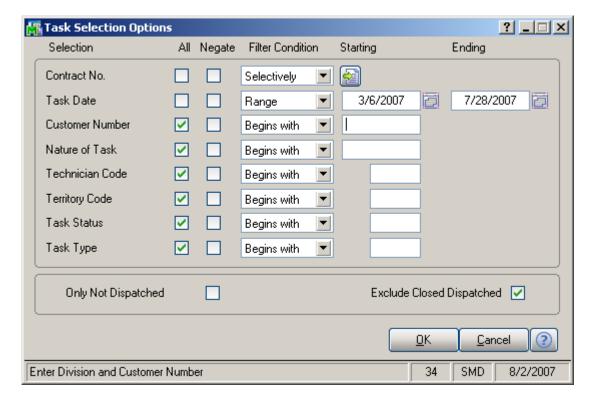
**Select All** – click to select all the check boxes.

**Deselect All** – click to deselect all the check boxes.

**Move Up** – click to move the selected field up one level.

**Move Down** – click to move the selected field down one level.

Click the **Selection** button to open the **Task Selection Options** screen.



Check the **Only Not Dispatched** box if you wish to display only tasks which have not been dispatched.

Check the **Exclude Closed Dispatched** box to exclude tasks whose dispatches have been closed.

If you wish to view tasks for a range of dates, select corresponding value in the **Filter Condition** column and specify appropriate information:

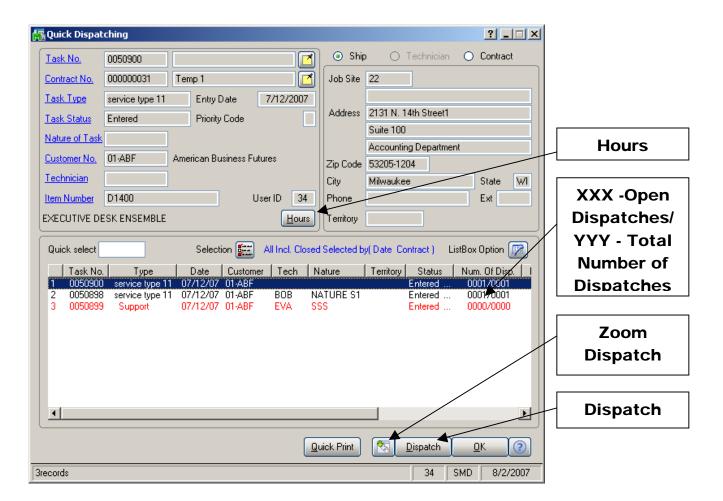
#### Begins with, Ends with, Contains, Less than, Greater

than – specify corresponding value

Range – specify the starting and ending values

Equal to – select the corresponding value

Selectively – you can select up to 5 values.



Click the **Zoom Dispatch** button to open the **Dispatch Inquiry** of the selected line.

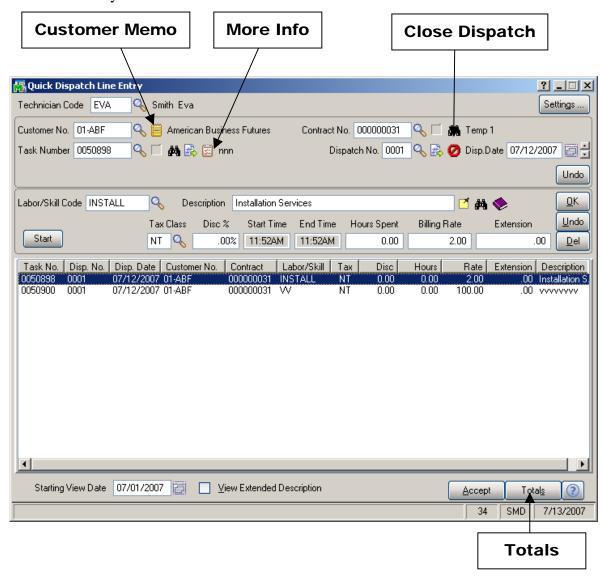
Use the **Dispatch** button to access a dispatched task to enter material or labor, or to dispatch a technician to the task. See **Dispatch Data Entry** for more details.

Use the **Hours** button to view the opening and closing hours at the customer job site.

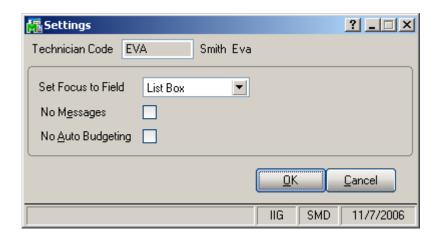
XXX/YYY – **XXX** represents the Number of Open Dispatches while **YYY** represents the Total Number of Dispatches.

# Quick Dispatch Line Entry

The **Quick Dispatch Line Entry** screen enables you to create Dispatch Lines for a specific Technician without going through all the usual steps. You can add a Dispatch for an existing Task or create a new Task for a new Dispatch not connected to any Customer or Contract.

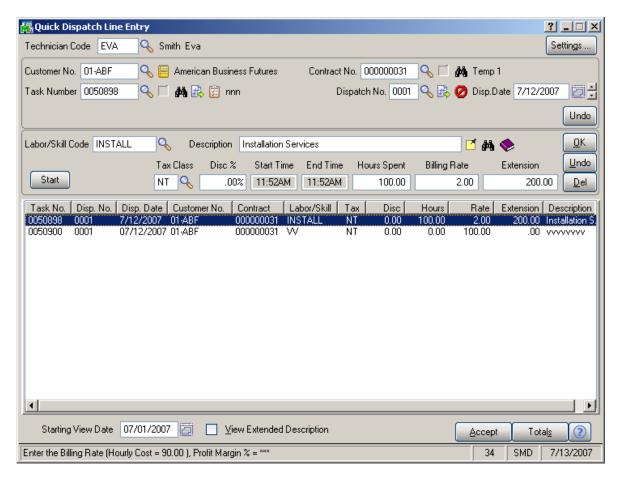


**Set Focus to Field** can be used to set starting point for entering information. This starting field is set separately for each technician. The focus will be set to this field next time you select that technician from the list.



Check the **No Messages** box to suppress displaying information and warning messages and memos when selecting Dispatch Lines.

The setting of the **No Messages** box is stored for each Technician Code separately.

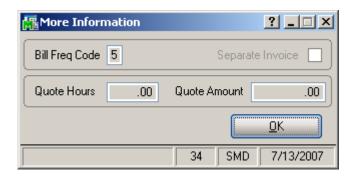


Click the **Customer Memo** button to select Memo for current customer.

Click the **Close Dispatch** button to close the selected dispatch directly from this screen.

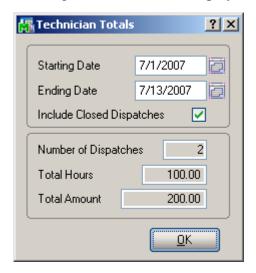
The **Search Contract, Task, Labor Description** buttons open the corresponding search screens. The search will be performed among all the dispatches in the system. The screens work as they do in the Task, Contract and Labor Entry screens.

Click the **More Info** button to enter some additional information on Bill Frequency Code, creating Separate Invoice, Quote Hours and Amount.



Select **Labor/Skill Code** and enter Hours Spent, Billing Rate, Extension if needed, and click **Ok** to create a Dispatch Line.

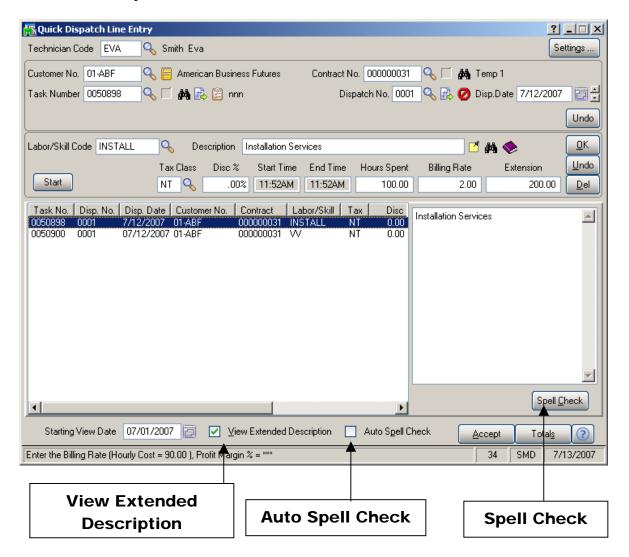
Clicking the **Totals** button displays the following screen:



The **Technician Totals** screen displays summary of the Lines added for the selected Technician. The information can **Include Closed Dispatches** also and displays the Total of spent Hours and Amount.

The Tax Class field becomes visible if the Calculate taxes on Labor option is set to Labor only or Labor with materials in the Service Management Options, and the Ship-to Address of the Task has the Calculate taxes on Labor box checked. The Tax Class will be defaulted to the one of the selected Labor/Skill Code. If the setting is Labor with material, the Tax Classes of the Dispatch lines will be used only if the Dispatch contains material lines (inventory, miscellaneous, special items). Comments are not considered material lines.

The **Tax** column is hidden from the list, if the **Calculate taxes on Labor** option is set to **No**.



Check the **View Extended Description** box to display Extended Description of the selected line at the right of the dispatch lines list view.

The **View Extended Description** mode is particularly useful for quick spell checking the extended descriptions of all the lines in the list. In this mode, you can use the *Arrow* keys on the keyboard to move from one line to another, and press the *Tab* key to move the cursor to the Extended Description view pane. Use the **Spell Check** button to check the spelling of the text in the Extended Description pane. After the Spell Checking is finished, the current dispatch line will be automatically selected in the list. If the text has been edited in the Extended Description view pane, pressing *Tab* will move

the focus to the dispatch line in the list. You can always press *Shift+Tab* on the keyboard to return to the Dispatch Line list. The changes in the Extended Description will be saved automatically when selecting another line. To discard the changes, click the **Undo** button.

In the **View Extended Description** mode, you can check the **Auto Spell Check** box to automatically start spell checking the Extended Description as the line is selected. With this **Auto Spell Check** option selected, all you have to do for spell checking all the Extended Descriptions in the Dispatch Lines list is to press the *Down* (or *Up*) key on the keyboard to go through all the Dispatch Lines.

The **Billing Rate** will be determined by the terms of a contract (if any) covering this task. If there is no contract, the rate will be based on the **Billing Rate Calculation Priority** in the **Service Management Options** program, where the priority of the technician, skill, and labor rates is indicated.

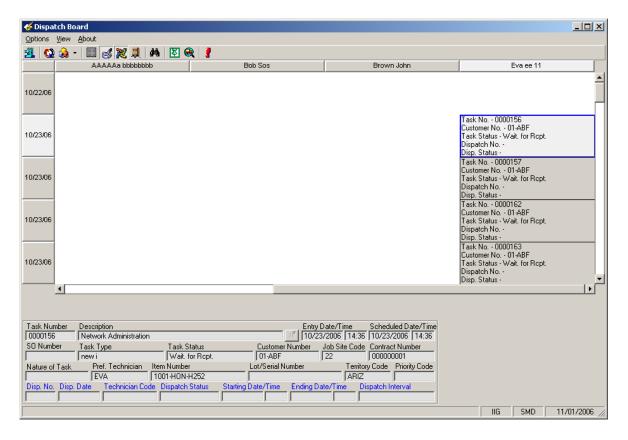
If the **Rate** is changed, it will be used for the selected combination of Technician, Labor/Skill, Customer, and Contract, next time when entering line for that combination.

Click the **Start** button to register start of working at the selected Line. The Start button will be changed to **Finish**. After finishing working at the Line, open the Dispatch and select the Line, then click the **Finish** button. The program will calculate the time between the start and finish of the work and add that time to the **Hours Spent** value. When the work is started (the button is **Finish**), hold the mouse over the button, to view the Start Date/Time in the tooltip.

### Dispatch Board

The **Dispatch Board** displays active tasks in cells with task dates and technicians placed vertically on the board or horizontally across the top of the board.

User specified information for each task or dispatch is displayed in a cell or span of cells. Each type of data in the cell (e.g., Customer, Task Number, Contract Number) can be color-coded for easier visibility. Also display names of data fields can be changed (for example, shortened). Color bars for Task/Dispatch Statuses can be displayed in each cell. An Overdue Dispatch can be highlighted by displaying its cell in a color different from other dispatches. The user can also filter the tasks by requesting only those tasks with data falling in certain ranges.



To see the details of a Task/Dispatch in the lower part of the screen, click on the cell containing that Task/Dispatch.

You can place technicians or dates horizontally across the top or vertically on the board. Also you can view duplicates of technician codes or dates if several tasks/dispatches have been assigned to the same technician and should be done on the same period of time.

You can also view the duration of each task. The span of the cells displays the Scheduled and Due Date/Time of the Task or the Starting and Ending Date/Time of the Dispatch.

You can change the width of the cells. Click anywhere between the names of Technicians at the top of the board, and drag the mouse to the right to increase the width or to the left to decrease it. The status bar displays the column count. All the columns will have equal widths when you release the mouse. The number of columns will remain unchanged when you resize the window, so you can adjust cell width by resizing window too. Rows will only have whole cells. A cell can be dragged to another date or technician, and the system will update the corresponding dispatch. A tooltip displays the destination date and technician name while dragging. The cursor is changed, if the move is not allowed (closed dispatch, moving to the Unassigned Technician column, moving without Date change).

Cells can be selected using keyboard Arrows, Page Up, Page Down keys.

Pressing Enter from the keyboard opens the selected task in the **Task Data Entry** screen. Pressing Enter when an empty cell is selected displays the **Task Data Entry** screen ready for new task entry.

Right-clicking on a cell (or using the Windows Application key on the keyboard) displays popup menu, from which you can quickly run some programs for the dispatch. To pass focus to the cells part of the screen (for example, after using Refresh), press Ctrl+G. The left upper cell of the displayed cells will be selected.

New Task displays the Task Data Entry screen ready for new task entry. The Next Task Number is selected, and the Scheduled Date/Time is set equal to the selected cell Date/Time. The selected cell Technician is loaded after selecting the Customer. **Open Task** displays the Task Data Entry screen for the current task. You can also open the Task Data Entry screen by double clicking on the task cell.

**New Dispatch** displays the Dispatch Data Entry screen ready for new dispatch entry for the selected task.

**Open Dispatch** displays the Dispatch Data Entry screen for the current dispatch. If the Dispatch Status is Closed, the Dispatch Inquiry screen is displayed instead.

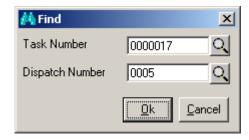
You can **Change Task/Dispatch Status**. If the program cannot change the status, a message appears explaining the problem. (For example, you cannot close a task that has open dispatches.)

**Dispatch Date/Time** displays the **Change Dispatch Date/Time** dialog box where you can change starting and dating date and time of the dispatch.

**Print Task** and **Print Dispatch** open the Crystal Report Printing.

**Send E-mail** opens mail client. You can send mails to Technician, Customer, or Both.

**Find** allows searching a specific task/dispatch on the Board. When a task has dispatches you will be warned to enter also the dispatch number. A Task Number cannot be found and displayed either when it doesn't exist or some options should be changed in order to display it.



The **main menu** located in the upper left corner of the Dispatch Board screen, contains the following submenus.



In the **Options** menu, you can select an existing **Options Type**, and **Edit Options** in the **Options for User** dialog box (described later). Current Options Type is indicated with a checkmark.

In the **View** menu, you can select to Show/Hide **Toolbar**, **Grid Lines**, **Fields**, **Blanks** (blank rows and columns), **Inactive Technicians**, **Refresh** the Dispatch Board view, and **Find** a specific Task or Dispatch on the Board.

The **Toolbar** enables you to quickly **Exit** the Dispatch Board, **Refresh** the view, **Edit Options**, select **Options Type**, **Show/Hide Grid Lines**, **Fields**, **Blanks**, **Inactive Technicians**, **Find** Task/Dispatch. Current Options Type is unavailable (already selected).

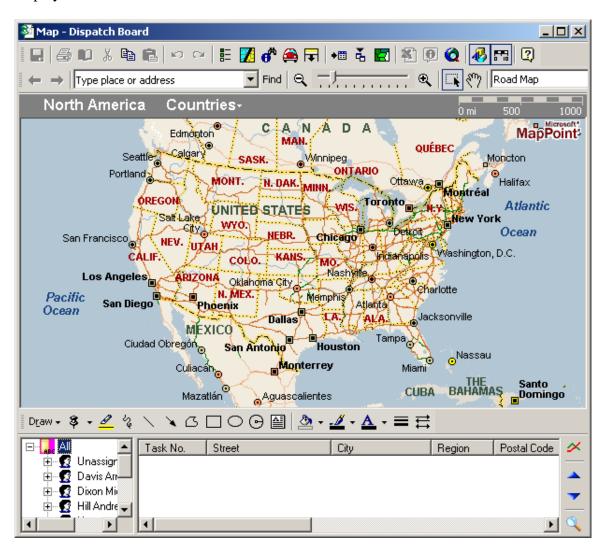
The **MapPoint** button launches the **Map-Dispatch Board** program.

Note: In order to launch the **Map-Dispatch Board** program, at first the RouteTrack program should be installed, since vehicle and truck information set for each technician is taken from RouteTrack program database.

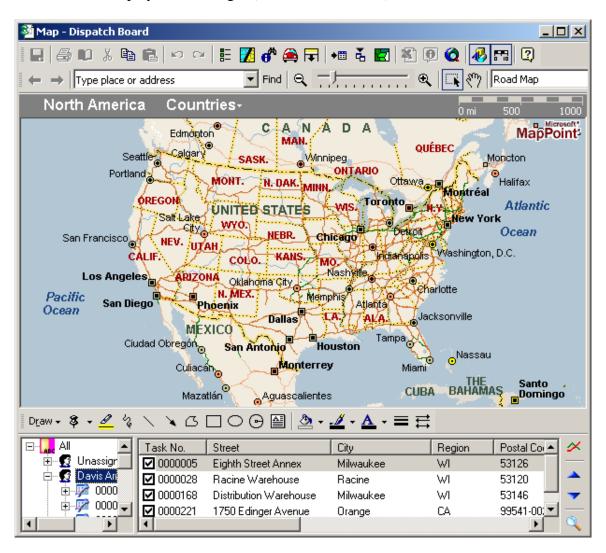
When trying to open the *Map-Dispatch Board* program without having installed RouteTrack program the following message is displayed:



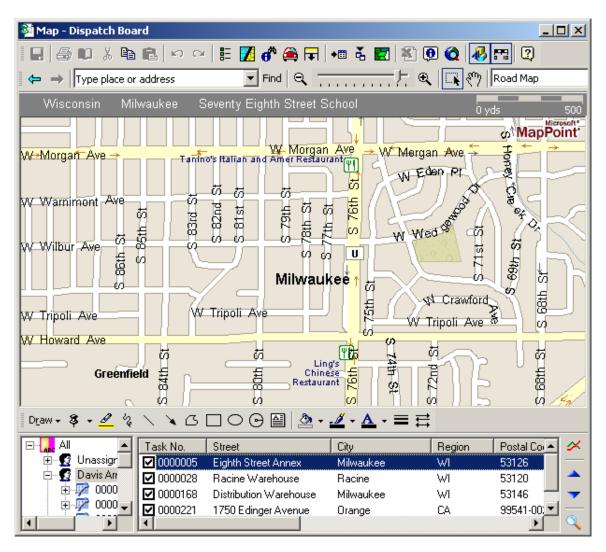
In the opened **Map-Dispatch Board**, at the bottom of the window, the tree-control on the left lists the **Technicians** displayed in the Board.



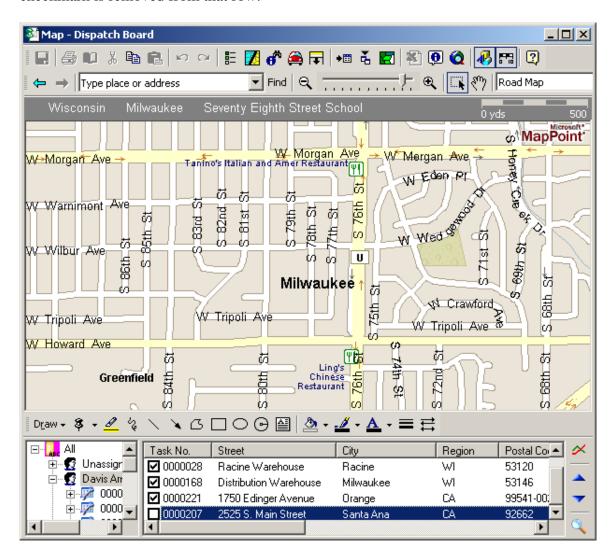
When clicking a **Technician**, Tasks assigned to that technician are displayed on the right (as it is on the Board):



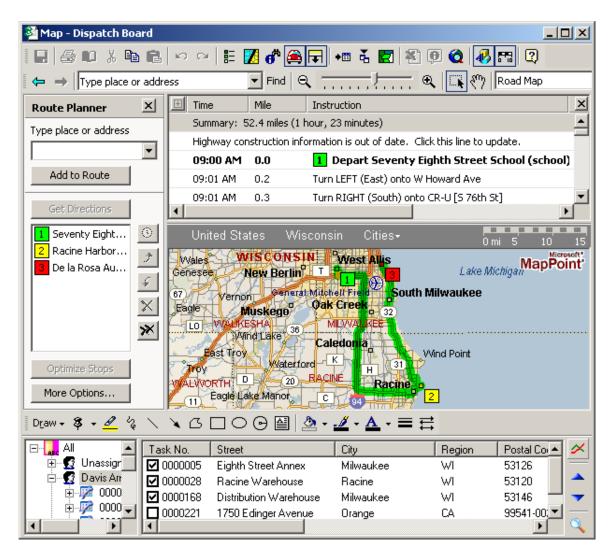
When selecting a task from the list, City map of the region is displayed.



If the program cannot find the place on the map, the checkmark is removed from that row:



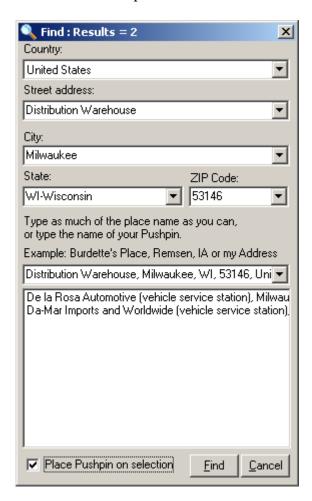
The **Calculate** button can be used for route calculation.



The route is calculated for the tasks with checkmarks, and displayed on the map and in the summary.

The **arrows** in the right bottom of the window allow rearranging the rows order for more optimal route calculations.

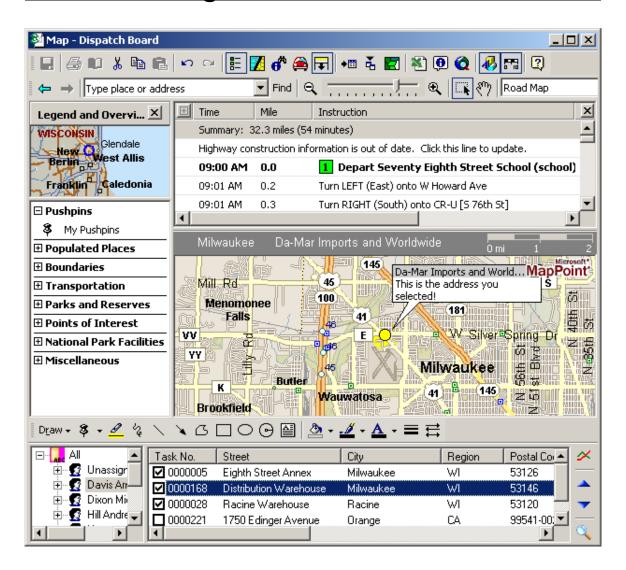
The **Find** button opens the **Find** window:

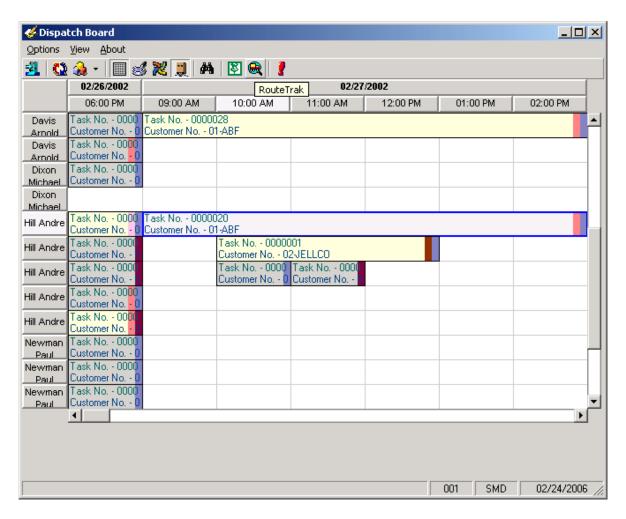


This window is always on-top.

If a **Task** is selected in the **Map** window, the address is automatically loaded in the **Find** window.

The **Place Pushpin on selection** box can be checked to place a Pushpin for the selected place.



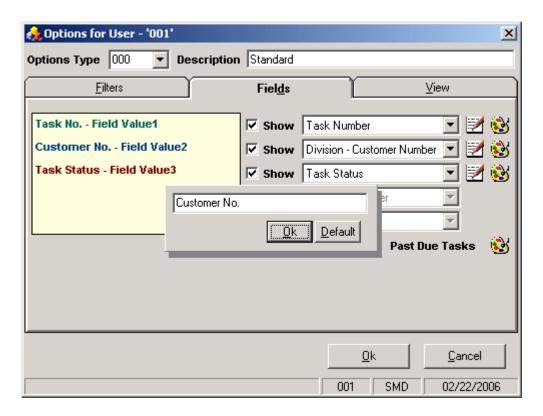


The RouteTrak button launches the RouteTrak program.

The Dispatch Board is automatically refreshed when Accepting changes in Task and Dispatch Data Entries, Closing tasks, creating new tasks and dispatches.

To control which data fields appear in the cells (and their colors), select the **Edit Options** submenu from the **Options** menu.

Click the **Fields** tab in the displayed **Options for User** dialog box.

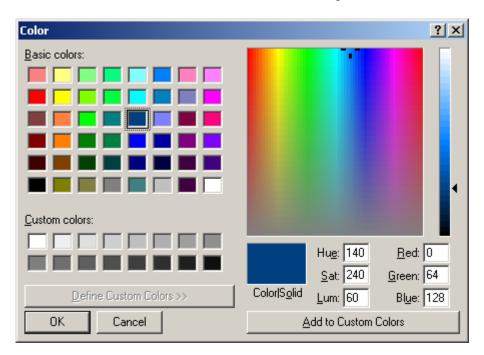


You can choose five data fields to be displayed in the cells of the board. Select fields from the drop-down lists, and see preview on the left.

You can hide fields if you do not need all five fields displayed. Uncheck the boxes next to fields that you do not want to be displayed.

Besides, you can change the display name of selected fields. Click the **Edit** button. An edit box is displayed, where you can type a shorter or more convenient name for the field. (You can even delete the name at all, if you have highlighted the field with color or simply remember which one it is.) Click the **Default** button to reset the name to the default. Click **OK** to save the new display name.

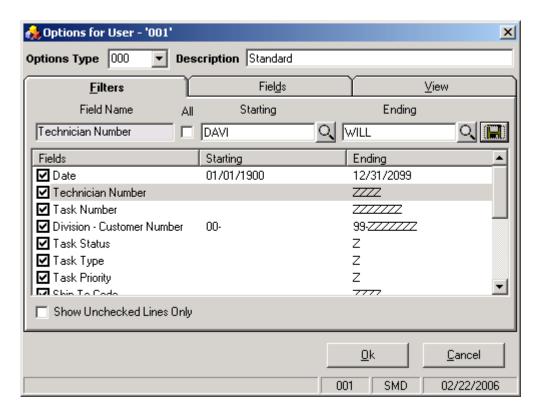
To change the color of a field, click its **Color** button. Select color in the standard Windows **Color** dialog box.



You can select a background color for **Past Due Tasks** cells. The cells representing dispatches with Ending Date earlier than current system date will be displayed with that color.

On the **Filters** tab, you may request to see only those task/dispatches meeting certain criteria.

To set a range of technicians (or just one technician), click the **Technician Number** line.



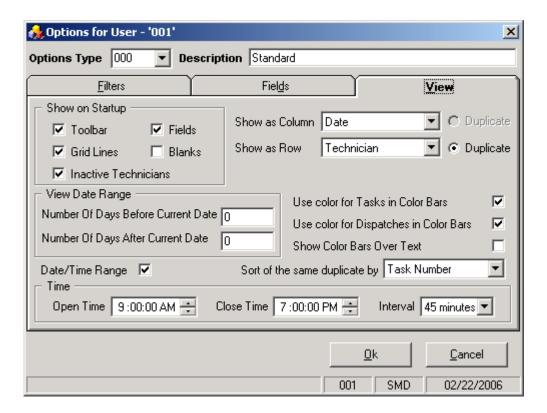
Enter the Starting and Ending **Technician Numbers** and click the **Save Change** icon to the right.

To undo the range selection, place a check in the box to the left of the field name. This checkbox means that all possible values of the field will be displayed on the board.

Repeat the process to select a range of data for any other fields you may wish to limit. Use the **OK** button when you are done.

Check the **Show Unchecked Lines Only** box to display only lines with limitations of range.

Go to the View tab.



Check the corresponding boxes in the **Show on Startup** section to show **Toolbar**, **Grid Lines**, **Fields**, **Blanks**, **Inactive Technicians** each time the Dispatch Board starts.

You can set the **Numbers Of Days Before** and **After Current Date**. This can be useful to locate tasks and dispatches more easily and also to shorten refresh time of the Board. If both are set to 0, all the Dates are displayed.

Check the Use color for Tasks and Dispatches in Color Bars boxes to display the color bars with the colors corresponding to the tasks and dispatches statuses. Check the Show Color Bars Over Text box to display the color bars over the text in cells, to view the colors more clearly.

You can form the Board based on the **Show as Column** and **Show as Row** fields. Select what should be displayed on the top across the board (for instance, it can be technician or dates), and what should be displayed vertically. Select the **Duplicate** checkbox if you want to see duplicated columns or rows (in case the same tasks are assigned to the same technician and should be done on the same period of time).

If you want to view the span of the cells, select the **Date/Time Range** checkbox. When this checkbox is selected, the **Duplicate** checkbox will be disabled for **Show Row/Column as Date** case.

In the **Sort of the same duplicate by** field select the field (Task Number, Priority Code, Scheduled or Start Time, Scheduled Time, Dispatch Start Time) based on which sorting within the same duplicates (for instance, Technicians or Dates) should be done. But in some cases, in order to avoid using extra spaces on the board, the sorting order may be contravened by inserting the tasks/dispatches (or span of tasks/ dispatches) in fitting free spaces.

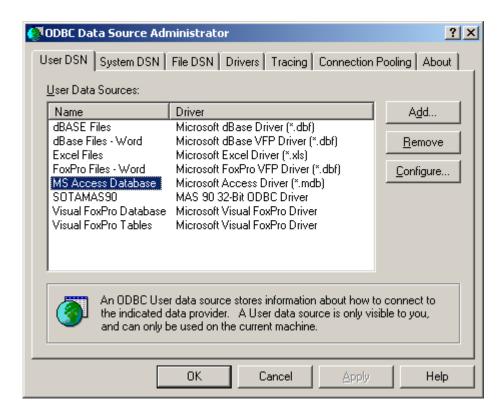
In the **Time** section you can enter the **Open Time** and **Close Time** and specify the Time Interval of tasks/dispatches. When no time interval is selected (**None** is selected in the **Interval** field), Open Time and Close Time fields will be disabled (tasks on the board will be shown only by Dates).

By default, the displayed fields, names, ranges and colors are saved for each user and each company separately under Options Type 000 Standard. You can create different views. Enter new **Options Type** and **Description**. Make your changes, and click **OK**. The view will be saved under current Options Type. Next time opening the dialog box you can select any of existing Options Types. Note that entering new Type code will clear all the settings to defaults.

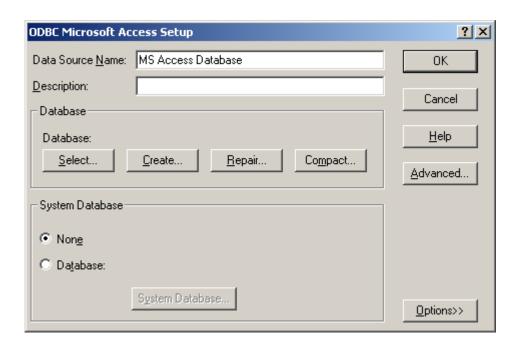
# Remote Database Update

When working via web, users make their modifications to a MS Access file, and then **Remote Database Update** must be run to insert those modifications in the real database of MAS 90.

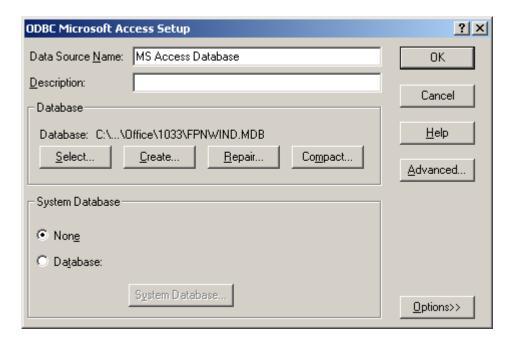
To be able to use the **Remote Database Update** feature, check the settings of the ODBC Data Sources. Open the **ODBC Data Source Administrator**.



Select MS Access Database and click Configure...

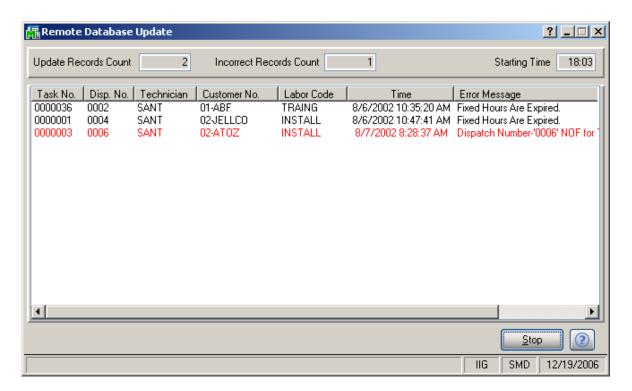


Click **Select...** and select any arbitrary valid MS Access file (with the .mdb extension).



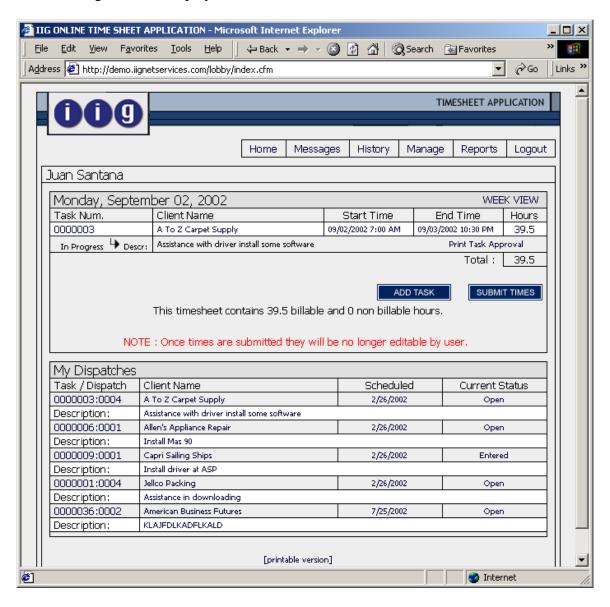
**Note**: If SQL version of the MAS is used, the database should be selected on the computer setup as the server.

The **Remote Database Update** screen displays information on updated records, as well as details of errors during update.



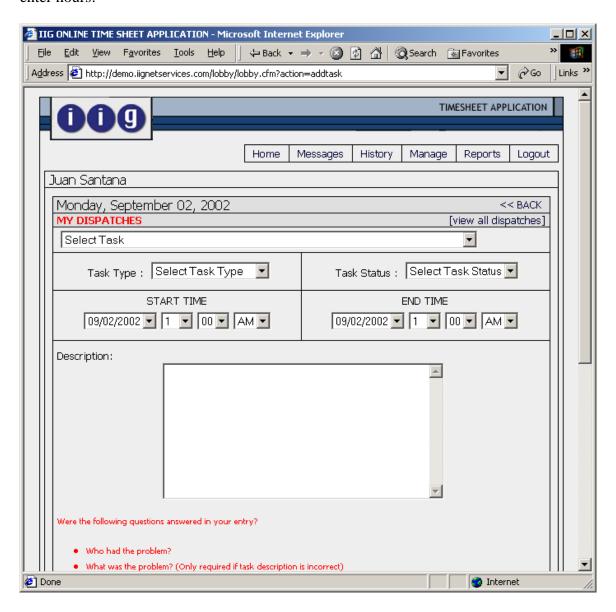
Via Web technicians can enter hours for their dispatches each day.

When a technician logs into the system of Web Hours Entry, the following screen is displayed:



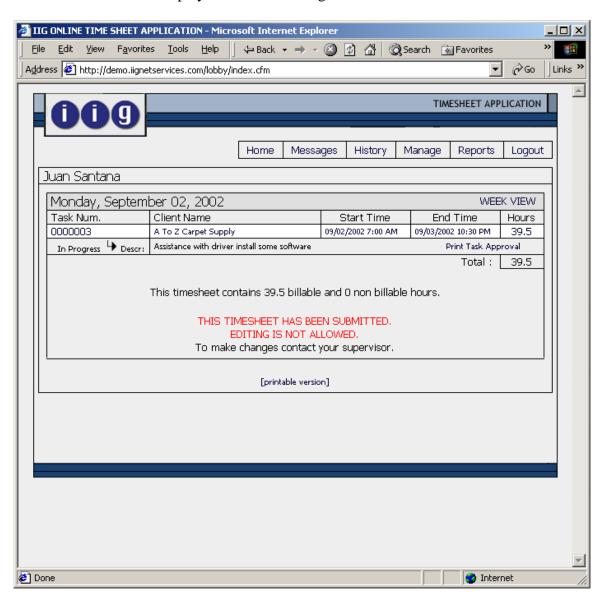
Entered previously on the same day hours are displayed above the **Add Task** and **Submit Times** buttons. All the dispatches are listed below.

Click the **Add Task** button to enter hours for another task. The following is displayed, where you can select task and enter hours:

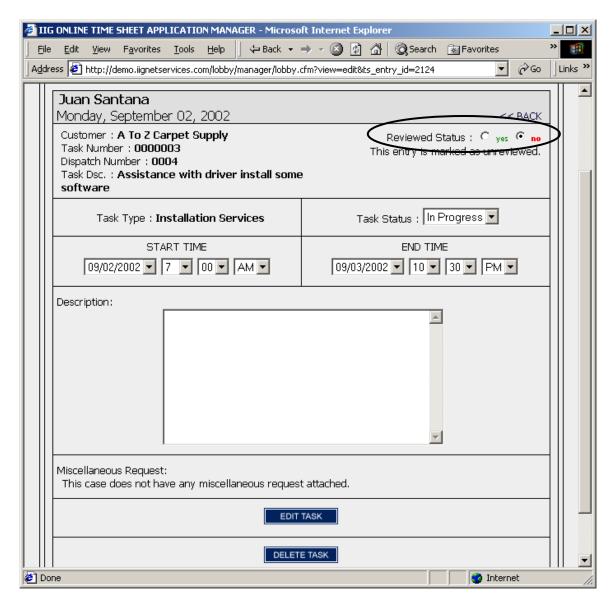


After entering all the hours, click the **Submit Times** button on the first screen listing tasks and entered times. A message will be displayed asking to confirm if you want to submit the timesheet. Once submitted you can no longer edit any entry in it.

The list of tasks is not displayed after submitting times:



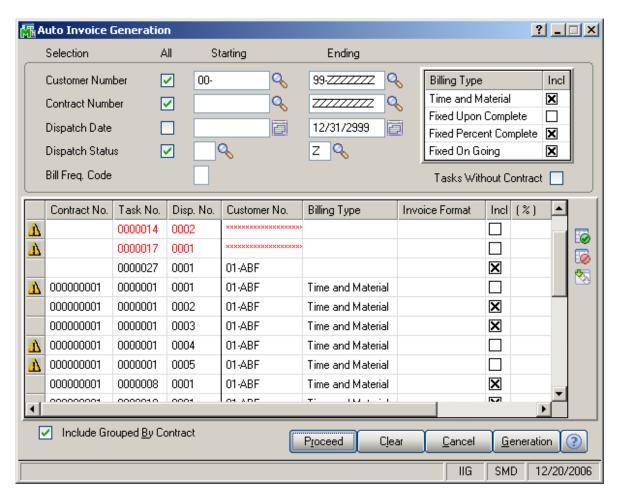
To review a task, click on its name. In the following screen, select the **Reviewed Status: Yes** radio button and click the **Edit Task** button.



When timesheet is submitted, it is written in the database specified in the **Service Management Options** program. Reviewing might be required for the task to be processed by the **Remote Database Update** program, if the corresponding box is checked in the Options.

### Auto Invoice Generation

The **Auto Invoice Generation** program can be used to easily create Invoices with automatic generation.



You can choose to process all the customers and contracts or select only those with numbers falling into the range set by starting and ending. Also you can select dispatches by date and status, by Bill Frequency Code of the Task and Bill Type.

Check the **Tasks without Contract** box to select the tasks not having contract assigned in addition to the other selections.

After making selections, click the **Proceed** button to display the list of dispatches matching these selections. The Proceed button adds newly selected dispatches to the list of already selected ones.

Click the **Clear** button, if you want to remove dispatches from the list according to the selections.

The **Cancel** button sets the Customer Number, Contract Number, Dispatch Date and Billing Type to default selections.

Place or remove checkmarks in the **Include** column of the list. Auto generation will generate invoices only for checked dispatches.

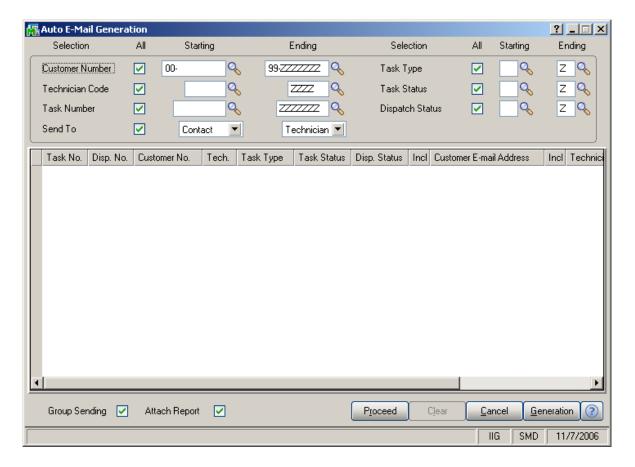
To start generating invoices, click the **Generation** button.

For the Fixed Upon Complete, Fixed Percent Complete and Fixed On Going billing types, amount of the invoice is calculated from the contract total amount taking into account already paid invoices. For Fixed Percent Complete type, this is done by percents of completion. You should enter the percent of completion in the (%) column if the Billing Type is For Fixed Percent Complete. Invoices will be generated for the contracts, which Percent Complete has been changed since the last invoice generation. For these three Billing Types, Special item will be added to the generated invoice, to balance the Invoice Total against the contract's total amount (percent of it, if Fixed Percent Complete).

If the contract has a task generated from a Sales Order with deposit, separate invoice will be generated for that Sales Order, irrespective of the Separate Invoice option for its tasks. The total amount of the generated invoice will be subtracted from the sales order deposit. If the invoice is deleted, the deposit of the sales order will be restored.

### Auto E-Mail Generation

The **Auto E-mail Generation** program can be used to easily create E-mails.



You can choose to process all the customers, technicians and tasks or select only those with codes falling into the range set by starting and ending. Also you can select tasks and dispatches by Type and Status.

You can **Send To** mails to Contacts, Customers, Technicians.

Check the **Group Sending** box to send mails by groups. If there are multiple mails to be sent to the same person, they will be grouped and sent as a single mail.

Check the **Attach Report** box to send reports attached to the mails.

Enter the E-mail addresses of Customers, Contacts, and Technicians in the corresponding columns.

The **Proceed** button adds newly selected dispatches to the list of already selected ones.

Click the **Clear** button, if you want to remove dispatches from the list according to the selections.

The **Cancel** button sets the selection criteria to defaults.

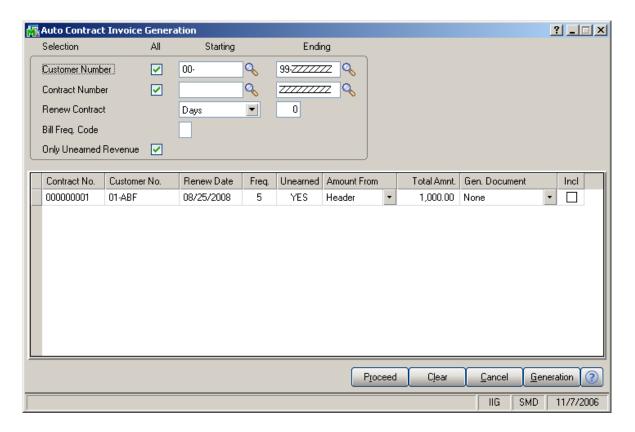
Place or remove checkmarks in the **Include** column of the list. Auto generation will generate e-mails only for checked dispatches.

To start generating mails, click the **Generation** button.

After generating mails, corresponding lines will be removed from the list.

### Auto Contract Invoice Generation

The **Auto Contract Invoice Generation** program can be used to easily generate Invoices, Standard Orders and Price Quotes for the items of Contracts. Tasks of the contract are not taken into account.



You can choose to process all the customers and contracts or select only those with numbers falling into the range set by starting and ending. Also you can select by Bill Frequency Code.

If you want to select only contracts with unearned revenue, check the **Only Unearned Revenue** box.

**Renew Contract** field can be used to renew **Contract Ending Date** directly from here. When selecting contracts and proceeding with the selection, in the grid, the Renew Date field shows the Contract Ending Date set on the Contract Entry screen. From the Renew Contract, select Days or Months and enter the number of days or months by which the Contract Ending Date should be prolonged. Or you can select Date from the drop down box and enter the renew date that should be set as new Contract Ending Date (do not forget to Clear the selection before proceeding with renew dates). In the grid, all the selected contracts' Renew Dates will be changed. You can also change the renew date directly in the grid for each contract separately. The Contract Ending Date changes will be reflected after invoices generation (click the Generation button to apply them). The Contract Ending Dates of the selected contracts will be prolonged only (that is, if the renew dates are before the contract ending dates, no changes will take place with those contracts ending dates).

After making selections, click the **Proceed** button to display the list of contracts matching these selections. The Proceed button adds newly selected contracts to the list of already selected ones.

Click the **Clear** button, if you want to remove contracts from the list according to the selections.

The Cancel button sets the selections to defaults.

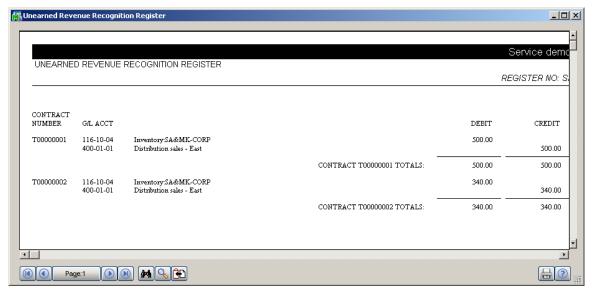
Place or remove checkmarks in the **Include** column of the list. Auto generation will generate invoices only for checked contracts.

To start generating invoices, click the **Generation** button.

# Revenue Recognition Register

When running the **Unearned Revenue Recognition Register** program from the **Service Management Main**menu, the amount will be transferred to sales account.

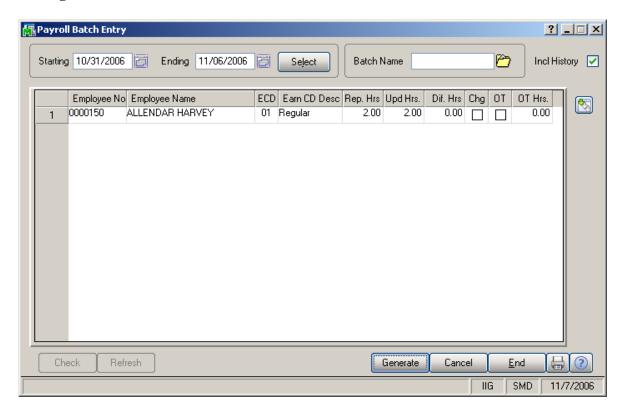




This also can be seen in the **Contract Entry** screen:

## Payroll Batch Entry

Select the **Payroll Batch Entry** program under the **Service Management Main** menu.

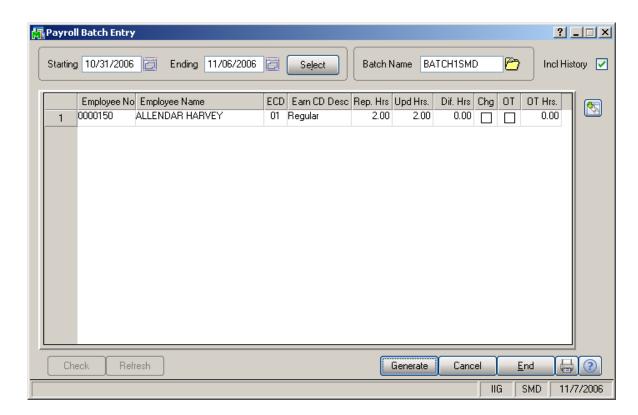


To create new batch, enter **Starting** and **Ending** Dates or use calendar clicking the **Lookup** buttons. When selecting the **Starting** date, the **Ending** date is automatically calculated by adding a week to the **Starting** date. The **Ending** date can be changed after that, if needed. When the screen is opened first, the dates are set to define the last week, that is, the **Ending** date is set to the current system date, and the **Starting** date is calculated respectively.

#### Click the **Select** button.

The program displays the Labor lines of the dispatches corresponding to the selected time period.

Check the **Include History** box to search for labor lines of current period in history too. By default this setting will be the same as the **Include History in Payroll Batch** in the **Service Management Options** screen, and can be changed for the current batch.



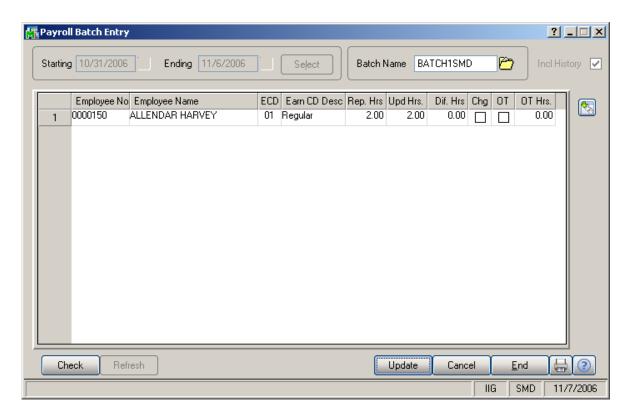
To open an existing batch, click the **Open Batch** button, and select the previously saved batch.

The **Updated Hours** field displays the information from the Labors for the dispatches and cannot be changed. When trying to change or delete a Labor line already included in a Payroll Batch, from the Dispatch Data Entry program, a warning message is displayed to confirm the change.

The **Reported Hours** fields in the list can be modified. If the batch is already saved, it can be opened for reviewing and modifying the entered Reported Hours.

**Difference Hours** fields display differences between **Reported** and **Updated** Hours. Difference is displayed in blue if it is negative, and in red if it is positive.

For a new batch, enter the **Batch Name** and click the **Generate** button. The batch is generated and saved.

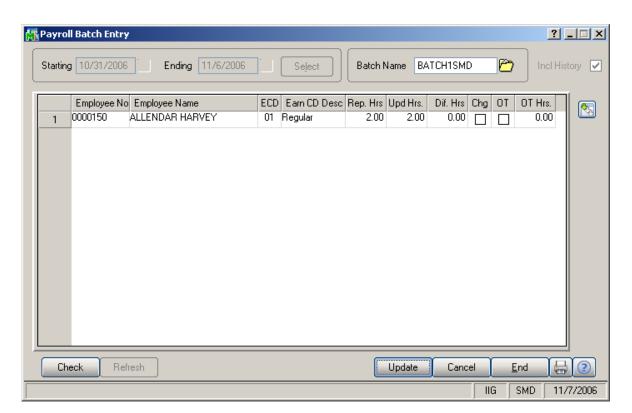


For a previously entered batch, click the **Check** button to find out if the Labor lines in dispatches have been changed, added or removed since the entry of the batch.

The following message displays the numbers of changed or deleted, and added lines.



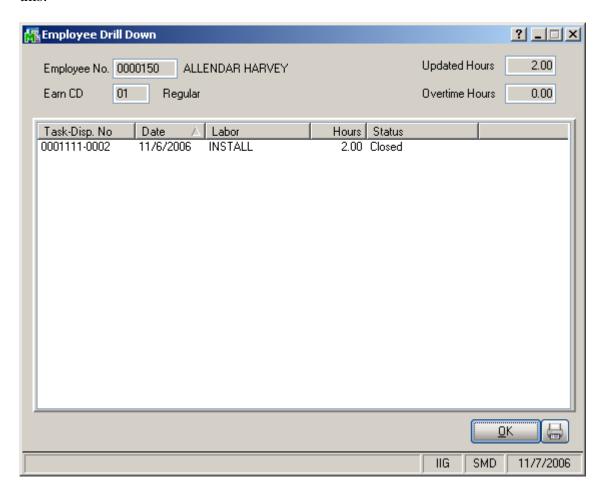
Click the **Refresh** button to reflect the changes.



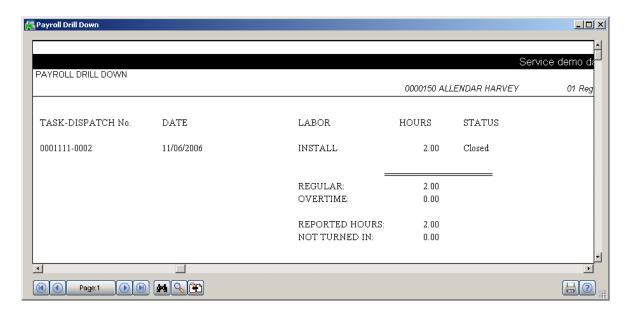
When a Payroll Batch is used in the Payroll Data Entry, the Updated Hours are payable.

Select a line and click the **Drill Down** button to see the details of hours for the selected Employee.

The Drill Down for the Line 1 before Refresh looked like this:



Click the **Print** button in the **Employee Drill Down** screen. Here is an example of Drill Down information printout:

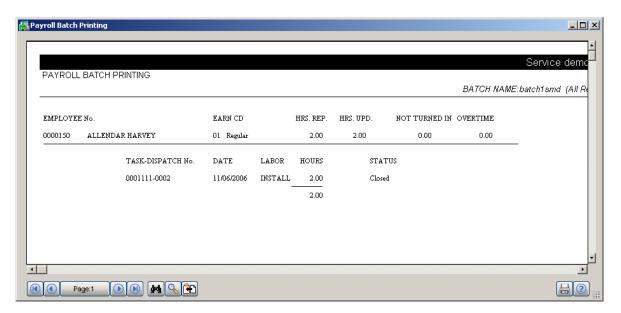


In the Payroll Batch Entry screen, click the Print button.

The following message asks whether to print all the lines or only those with non-zero Difference Hours:



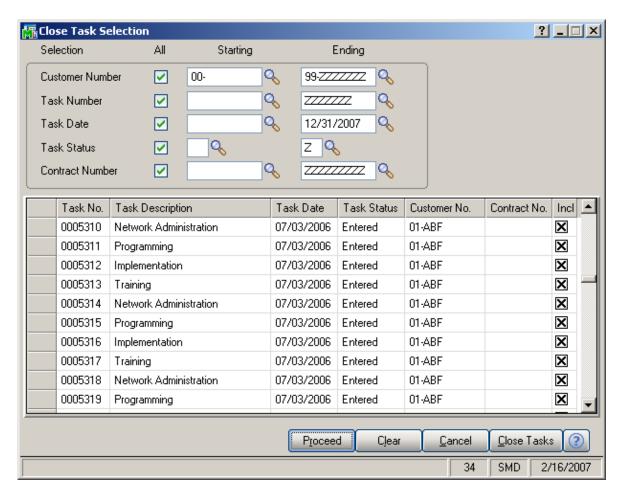
Here is an example of printout:



In the **Payroll Batch Entry**, click the **Update** button to save changes in the file.

### Close Task Selection

The **Close Task Selection** program allows closing multiple tasks at once.



Tasks can be selected by Customer Number, Task Number, Task Date, Task Status, Contract Number.

Only tasks not having active dispatches are displayed in the grid.

Place the checkmarks for the tasks you want to close, and click the **Close Tasks** button.

After changing the statuses of the included tasks, Closed is displayed in the **Task Status** column. If the program cannot close a task, its status will be displayed in red.

## **Budgeting Maintenance**

The **Budgeting Maintenance** allows planning hours for specific Jobs, Contracts, and Tasks assigned to Technicians.

When opened first, no budgeting exists for the current month, and the program suggests that you create budgeting:

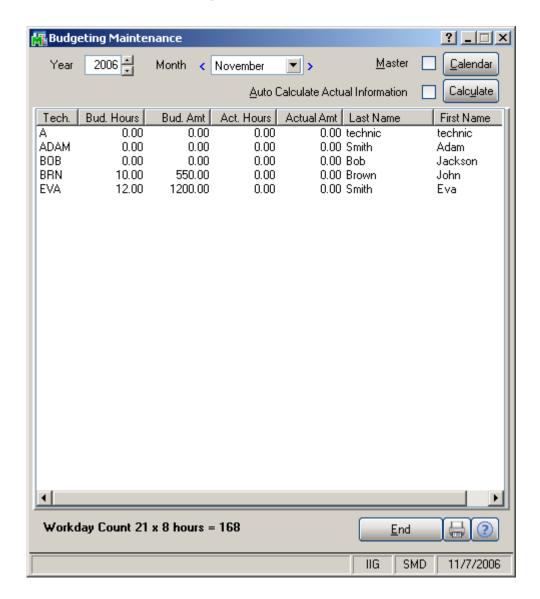


At this point, answer **No** to set the **Master** budgeting first.

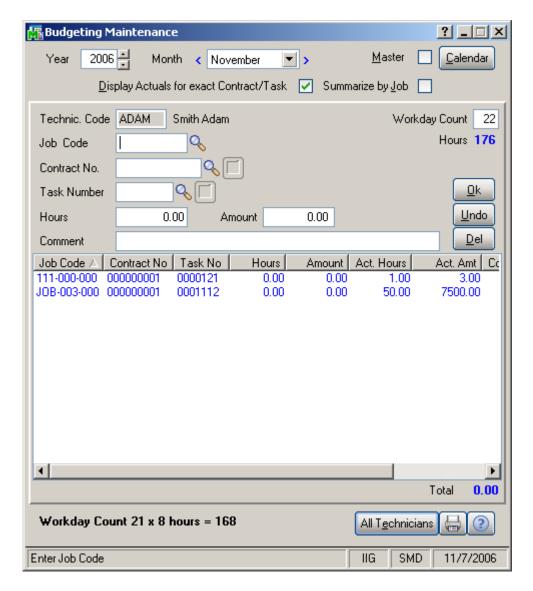
After the **Master** budgeting is created, you can answer **Yes** when opening a new month, to create the table for all the Technicians copying from Master budgeting and collecting available information for the month.

When you select **No**, the list remains empty.

Check the **Master** box to specify the standard hours applicable for Technicians for all the months.



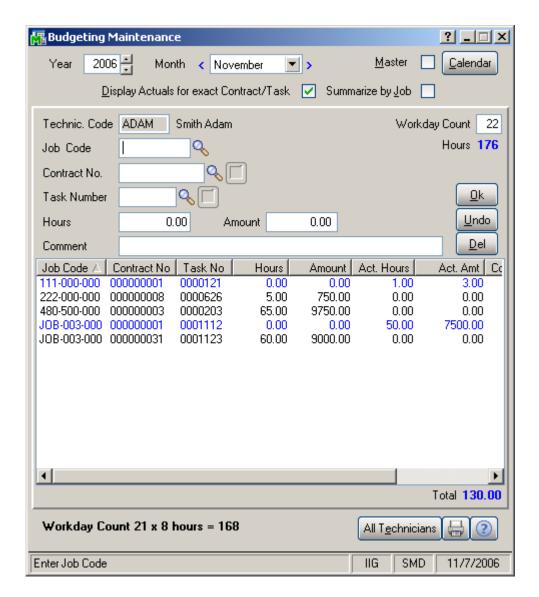
Double-click on a Technician row to enter hours for him:



Enter lines. Note that multiple lines can be entered for the same Job, Contract, Task combination.

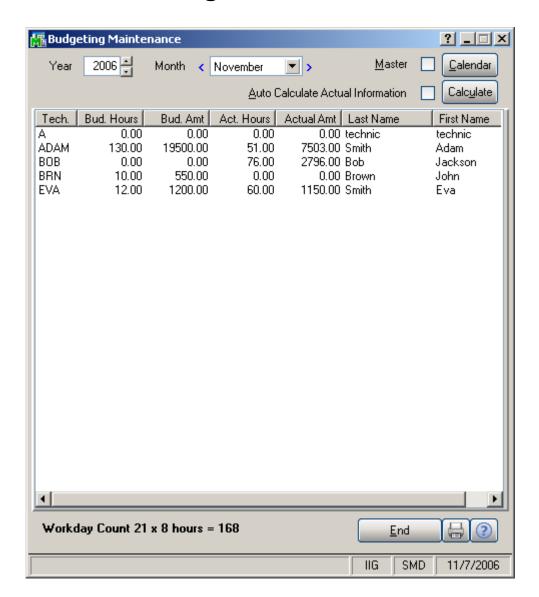
**Total** below the list displays the sum of the entered hours.

Use the **All Technicians** button to return to all Technicians list.



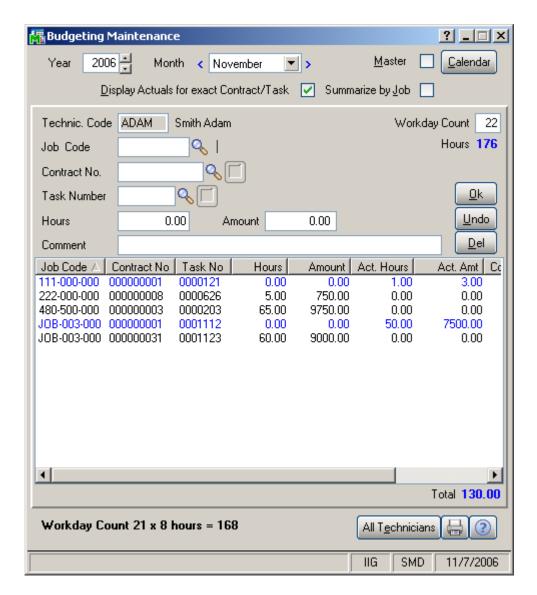
**Year** and **Month** can be selected to view/edit budgeting, if **Master** is not checked.

When budgeting is created for a new month, **Master** budgeting is copied, after which you can add month-specific hours.



In the All Technicians mode, you can check the Auto Calculate Actual Information box to make the program automatically calculate the Actual Hours and Amounts for all the Technicians each time new month or/and year is selected. This is convenient if you are browsing by months to review both budgeting and actual information at once for all the technicians. But this might take rather long to bring the selected month's information on large systems. To quickly review only budgeting information, clear the Auto Calculate Actual Information box, to save time. In this mode, you can always use the Calculate button, to calculate and display actual information only for the currently selected month.

Double-click to edit budgeting for the selected month:



**Workday Count** for the selected month and technician can be entered, and the **Hours** are calculated by the 8 hours a day schedule.

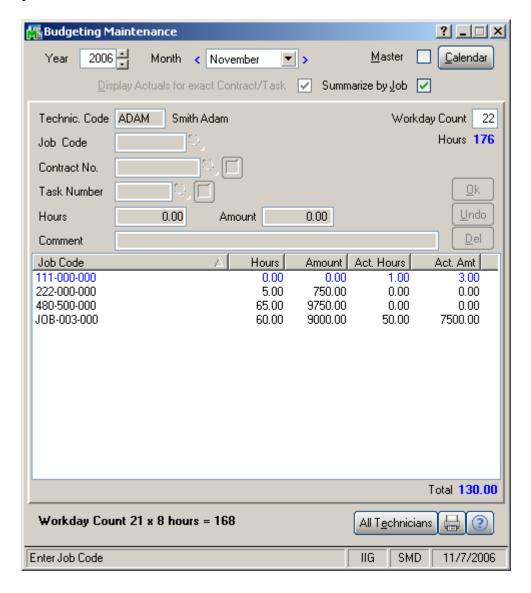
The **Workday Count of the calendar** (same for all the technicians) for the selected month is displayed in black at the bottom, along with the Hours.

Initially, the **Workday Count** (which can be changed later) is calculated according to the **Calendar**, equal to the Workday Count of the selected month.

The **Total** of the budgeted hours at the bottom becomes red, if the budgeted hours exceed the **Hours**.

The **Display Actuals for exact Contract/Task** option, when selected, allows display of actual hours in the line with corresponding contract/tasks only. If cleared, enables displaying actual hours not having corresponding budgeted line with exact contract/task in the line of the same job (without contract/task specified).

The **Summarize by Job** option switches to another display, where lines with different (or blank) **Contracts** and **Tasks** are summarized by **Job Code**, thus displayed as **single line** per **Job Code**.



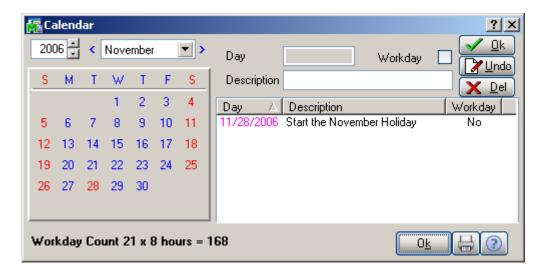
You can switch between **Master** and specific month modes for the selected Technician without going to the All Technicians list.

Lines are displayed in red, if the Actual hours spent exceed budgeted Hours.

Lines in the list are displayed in blue, if they are calculated from the dispatches and have Actual hours, but haven't been budgeted (Hours is zero).

You can have system automatically create budgeting lines according to the actual hours at the moment they are entered in the **Quick Dispatch Line Entry**, by clearing the **No Auto Budgeting** option in the **Settings** for the selected Technician.

Click the **Calendar** button to specify Workdays and Holidays for all the years or specific year, for the company. Calendar is the same for all the technicians, no matter edited from All Technicians screen or individual Technician screen. Only common holidays are specified, not vacations or days off.



Clear the year field to enter non-year-specific Holidays/Workdays for the selected month.

When a Workday is selected (displayed in blue) by clicking in the calendar days part, the **Workday** check box is cleared. When a holiday is selected (displayed in red), the **Workday** check box is checked. So, it makes easier toggling the days

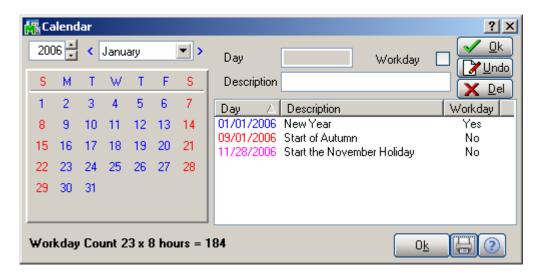
with simply clicking **Ok** (also perhaps description can be entered) after selecting it.



If year is selected, days of week are displayed, Sundays and Saturdays being regarded as holidays (red).

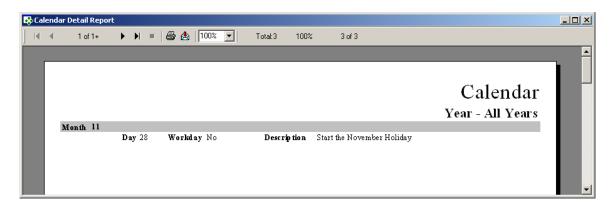
You can add year-specific holidays or workdays.

The entire year exception workdays and holidays are listed, including the non-year-specific holidays.



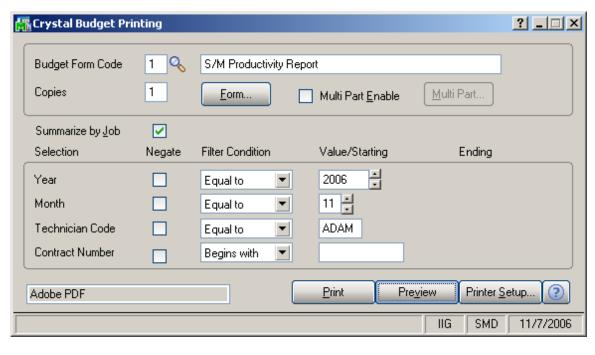
Workdays are displayed in blue, year-specific holidays in red, and non-year-specific in magenta.

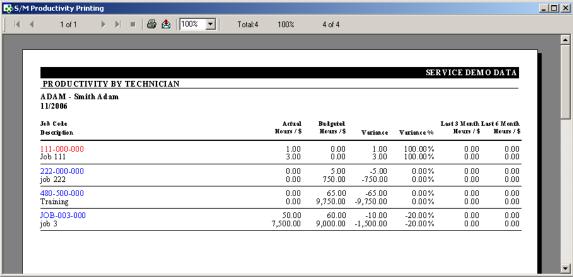
Click **Print** to print the list of holidays and workdays.



From the **Budgeting Maintenance** screen, click the **Print** button to print the **Budgeting report**.

The Report can be printed in **Summarize by Job** mode by checking the corresponding box.





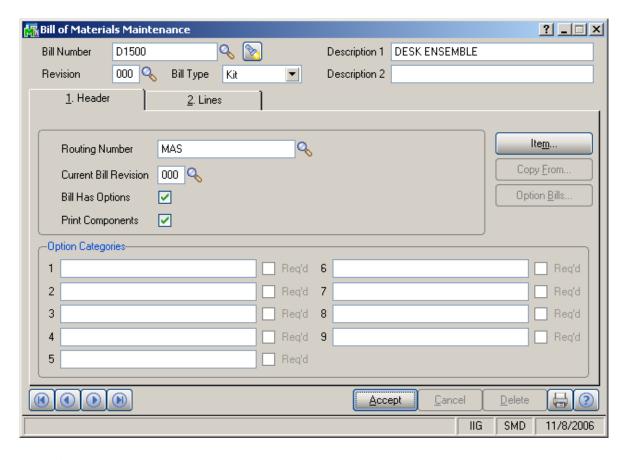
The Job Codes with Actual Hours exceeding Budgeted are displayed in red.

### The Bill of Materials Menu

### Bill of Materials Maintenance

#### Header Tab

**Bill of Materials Maintenance** is used to define the Bill of Materials. Through this option you can create, modify and view the format of a bill.



The **Bill Number** field is used to specify the number of the bill you wish to add or maintain. The Bill Number specified must already be a valid inventory item.

Use the **Description 1/Description 2** fields to enter descriptions for the specified bill.

**Bill Type** specifies the type of a bill. It may be set to either "Standard" or "Kit" in the **Service Management** Module.

The **Routing Number** field is used to enter numbers used in the manufacturing/repair/installation of a current Bill of Material.

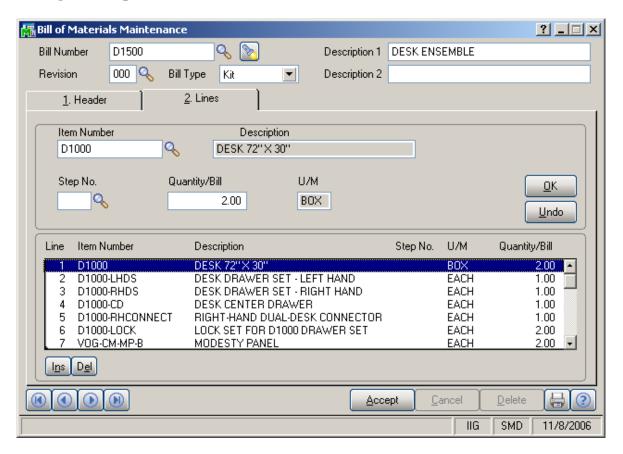
The **Option Categories** are available only when using options, entered during setup, on the bill. The user can specify as many as nine option categories. Option bills allow the listing alternatives, as well as additional items that can be added to the bill. Option bills are discussed later in this manual.

#### Lines Tab

The **Lines** tab lists items of the bill.

Use the **Item Number** field to enter line items. A Line Item can represent an Inventory Item or a Comment.

Numbers can be added 'on the fly' if **Allow Addition of New Items in Bill Maintenance** is selected under the **Service Management Options** window.



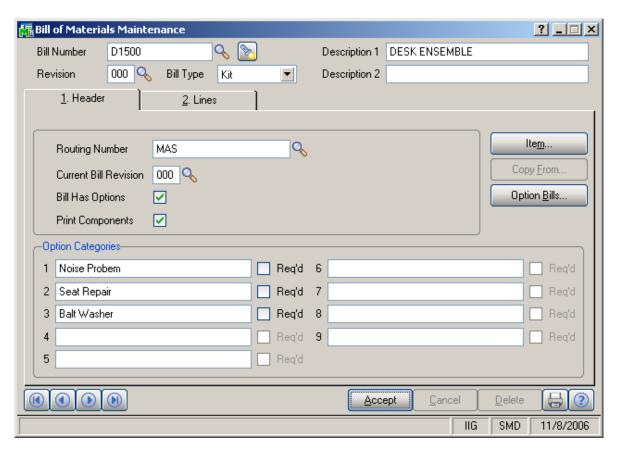
Type /C followed by a number between 1 and 99 to enter a comment code that is already defined, or enter simply /C for a comment that has not been defined.

**Option Bills** allow documentation of various configurations of the finished product without the necessity of defining a separate bill for each configuration. Options are often referred to as "features" or "accessories."

Instead of defining a separate bill for each possible configuration, you can define a single bill that represents the base model and a separate option bill for each non-standard option.

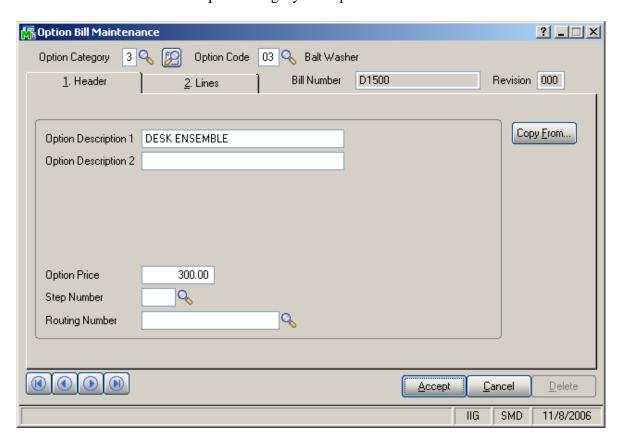
The **Use Option Bills** checkbox must be selected in the **Service Management Options** in order to access Option Categories in Bill of Materials Maintenance.

When creating a Bill of Materials with options, define the base bill first. Enter the components on the Lines tab that represents the default configuration of the bill.



- To set up options, select the **Bill Has Options** checkbox on the Header tab.
- Up to nine option categories can be used for a single bill.
- Categories are used to describe the different options available for the bill.

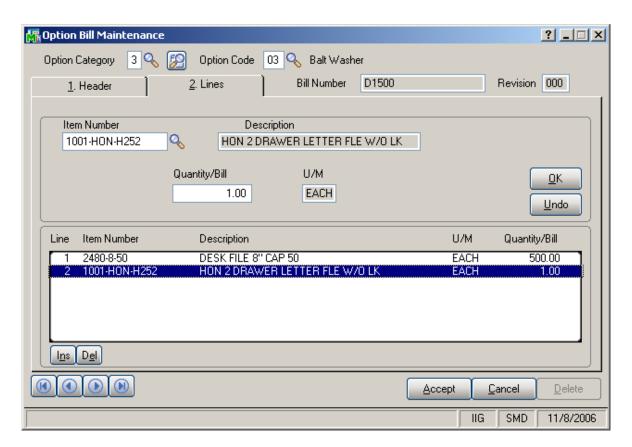
- If the Required checkbox is selected, an item from the category must be selected when ordering or producing the item.
- If the Required checkbox is not selected, the options can be either included or excluded from the order or production entry.
- Select the Option Bills button, and enter bill information for each option category and option code.



On the Option Bill Maintenance screen, define available options for each category defined. Multiple options can be defined for a single category.

Use the **Description 1** and **Description 2** fields to identify the option.

Use the **Option Price** field to specify the price charged for the option when selected on a sales order.



On the **Lines** tab, list the items and quantity you want to be added to the bill when the option is included. The options available for item entry are the same as discussed when entering items on the lines tab in the Bill of Material Maintenance.

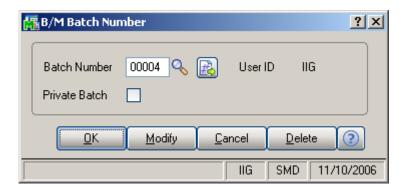
Depending on the setup of the original bill, you may need to add a negative item to remove a component and replace it with a new one. This should only be done if the option is to replace an item on the original bill.

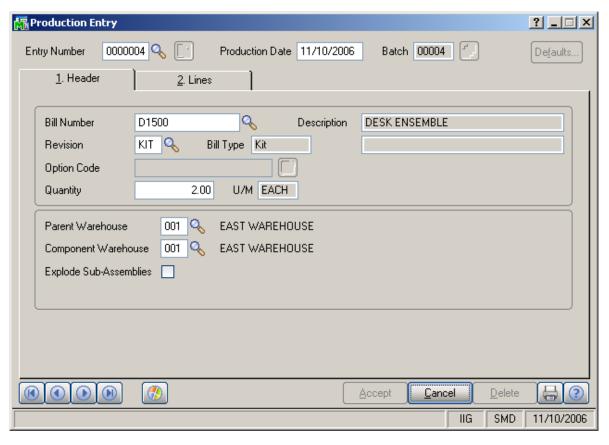
If an option category is marked as **Required**, you can list all of the options available using option codes, and leave the item off the original bill.

## **Production Entry**

**Production Entry** is used to enter the receipt of manufactured goods into inventory and the consumption of the corresponding component parts. This task is designed primarily to record manufacturing transactions after the assembly of the manufactured goods.

Production entries can be entered by batch.





All new entered transactions are attached to the batch number displayed in the upper-right corner of the Production Entry window.

Enter the **Entry Number** representing the production entry you want to add or maintain. Click the Lookup button to list all entry numbers. Click the **Next Number** button to accept the next new automatically incremented entry number specified in the **Service Management Options.** 

Enter a **Production Date.** This date is printed on the Production Entry Register as the date on which production of the finished product occurred.

Click **Defaults** to set default values for a common group of production entry records.

Enter the **Bill Number** representing the finished product you want to add or maintain. Click the Lookup button to list all bill numbers. Only standard and kit bills can be entered at this field.

Enter the **Option Codes** required for the bill configuration displayed. Click the Search button to use the **Option Selection** feature. If option categories are defined as required on the Bill of Materials Maintenance Header tab, you are prompted to enter an option code for those categories. An option code must be entered for any option categories defined as required.

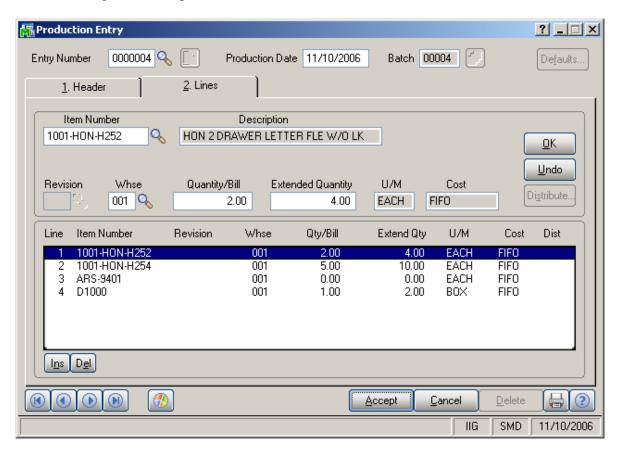
Enter a **Parent Warehouse** code. Click the Lookup button to list all warehouse codes. This warehouse is used to record the inventory location of finished products.

Enter a **Component Warehouse** code. Click the Lookup button to list all warehouse codes. This warehouse is used to record the inventory location of the component items that are used to manufacture finished products.

Enter the **Quantity** manufactured for the current bill. This quantity is added to inventory and is multiplied by the quantity per bill for each component to determine the component quantities used.

Click the **Explode Sub-Assemblies** check box to explode subassemblies. Clear the check box if you do not want to explode subassemblies.

When completing entries to the **Header** tab, the bill is exploded into its component detail lines and the **Lines** tab appears. Each line item represents a component item used in manufacturing a finished product.



Enter the **Item Number** identifying the line item. The item description appears. Click the Lookup button to list all item numbers.

Enter the **Warehouse** code from which the components were pulled. Click the Lookup button to list all warehouse codes.

Enter the **Quantity/Bill** of this component item or miscellaneous charge required to complete one bill.

Enter the component quantities in the **Extended Quantity** field to be posted to inventory as used, or the total quantity for the charge.

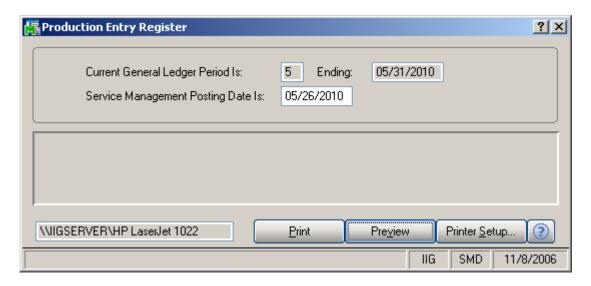
Enter a **Unit of Measure** for this charge.

Enter the per-unit **Cost** associated with the miscellaneous charge.

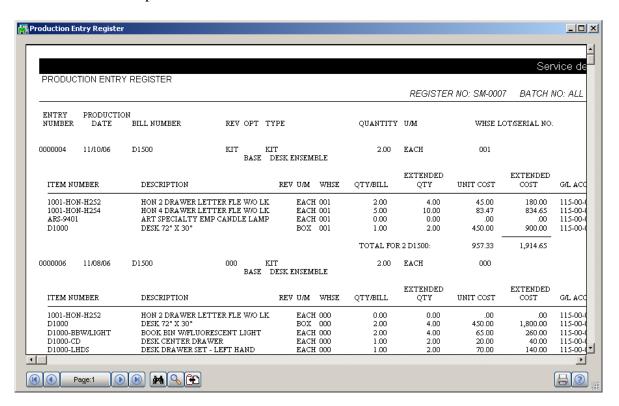
## Production Entry Register

The **Production Entry Register** lists all information entered in **Production Entry** and is used to check the accuracy of the entered data. You must print the register before the production entries can update (post) to the permanent files.

The register can be printed by batch if the **Allow Batch Entry** check box is selected in the **Service Management Options.** 



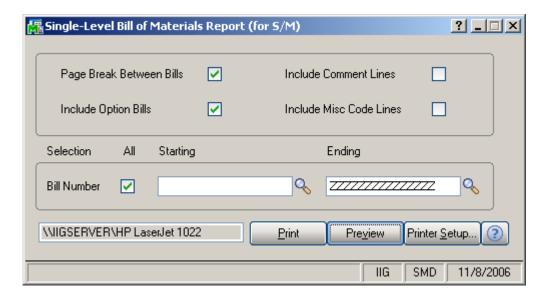
Here is the result of printout:



## **The Reports Menu**

#### Bill of Materials Report

The **Bill of Materials Report** prints the Bills of Materials entered through Service Management's **Bill of Materials Maintenance** screen.



The following check boxes are provided so you can include the desired amount of detail on the report:

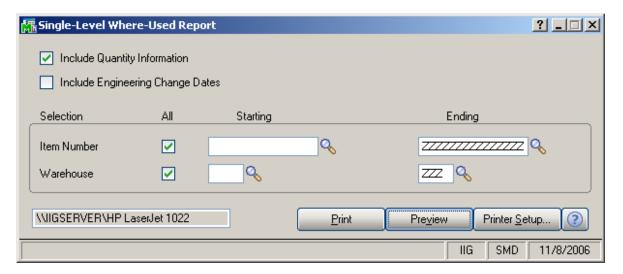
- **Include Comment Lines** By checking this box, you will list any comment lines, which were placed on the Bill of Materials.
- **Include Misc. Code Lines** –By checking this box, you will list any miscellaneous inventory items, which were placed on the Bill of Materials.
- **Include Option Bills** By checking this box, you can list the details of any option categories, which were placed on the Bill of Materials.

In addition, by checking the **Page Break Between Bills** box, each separate bill (in fact, each bill revision) will be listed on a new page.

Starting and Ending **Bill Number** range is also provided if you don't wish to see every Bill of Materials.

## Component Where-Used Report

The **Component Where-Used Report** prints a list of inventory items, which are components of one or more Bill of Material "parent" items. The quantity of the component required for each "parent" item is also listed.



Check the **Include Quantity Information** box to print the on-hand, sales order, work order, and purchase order quantity data for each "parent" item, by warehouse.

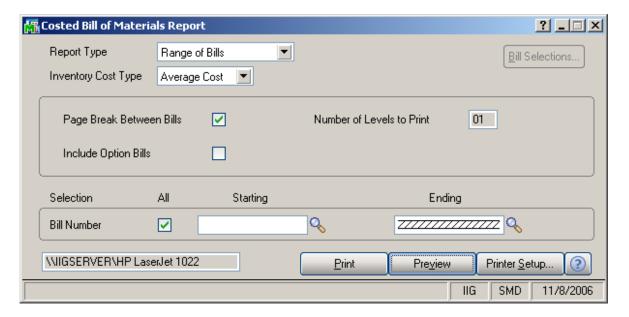
**Starting** and **Ending** ranges for the component items and warehouses (to view quantities) are also provided.

The checkbox for **Include Engineering Change Dates** is not currently used.

## Bill of Materials Costed Report

The **Costed Bill of Materials Report** lists the item costs and the extended bill costs for either a range of bills or for specific bill configurations.

You can use the average cost, the last cost, or the standard cost to calculate the item and extended bill costs. You can specify all or up to four bill types, and the number of bill levels to include in the report. Yield and scrap percentages are factored into the quantity requirement calculation.



Select one of the following **Report Types** to print:

Range of Bills – lists the cost of each and any option bills. Specific Bills – lists the costs of each bill configuration, including option bills.

Click the **Bill Selections** button to enter specific bill configurations. This is available only for Specific Bills report type.

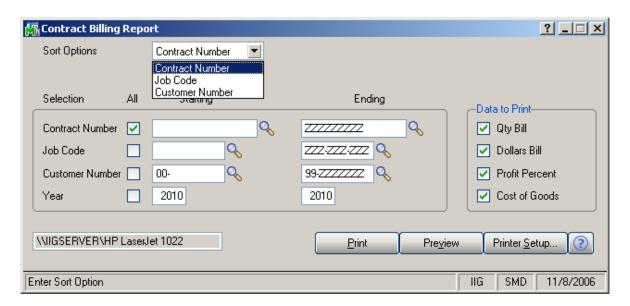
Select the **Inventory Cost Type**: Average, Last, Standard. Enter the maximum number of bill levels to print (up to 99). This field is available only if Range of Bills is selected at the Report Type field.

By checking the **Page Break Between Bills** box, each separate bill (in fact, each bill revision) will be listed on a new page.

A Starting and Ending **Bill Number** range is also provided if you don't wish to see every Bill of Materials.

## Contract Billing Report

The **Contract Billing Report** prints revenues and expenses posted to contracts through job codes. The report may be sorted by **Contract Number**, **Job Code**, or **Customer Number**.



By checking the appropriate box, you may request the printing of the:

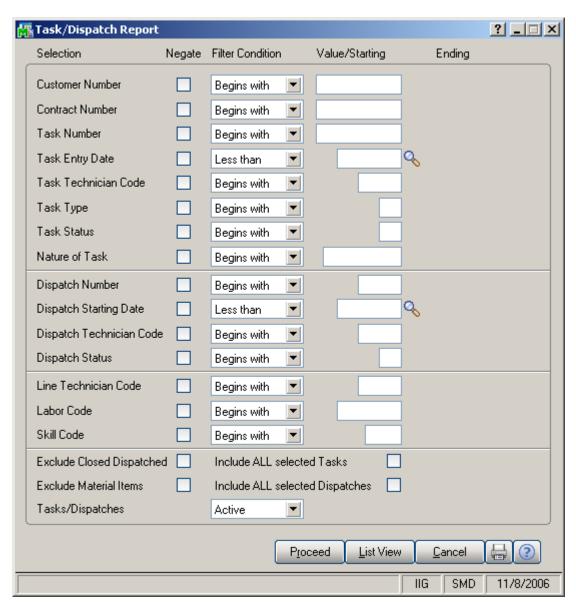
- Quantity Billed
- Dollars Billed (revenues)
- Profit Percent (100\*(revenues expenses)/revenues)
- Cost of Goods Sold (expenses)

Starting and ending range options are provided for **Contract Number**, **Job Code**, and **Customer Number**. Posting year(s) may also be specified.

## Task/Dispatch report

The **Task/Dispatch Report** program enables you to print various reports on tasks and dispatches information. The information to be displayed can be filtered using the selection options. Each field can be set to be Equal to, Less than, Greater than, Contain, Begin with, End with specified value. Alternatively, you can set a Range with Starting and Ending values for a field.

Each condition can be negated by checking the corresponding box.



Filtering fields include task, dispatch and dispatch line information.

Task specific fields are Customer Number, Contract Number, Task Number, Entry Date, Technician Code, Type, Status and Nature of Task.

Dispatch specific fields are **Dispatch Number**, **Starting Date**, **Technician Code** and **Status**.

Line specific fields are Line Technician Code, Labor and Skill Codes.

You can also use additional options to adjust selection to your needs.

Check the **Exclude Closed Dispatches** box to exclude dispatches with the Closed status from the report.

Check the **Exclude Material Items** box to exclude material items from the report.

Check the **Include ALL Selected Tasks** box to include all the tasks satisfying task specific selections unaffected by the dispatch specific selections.

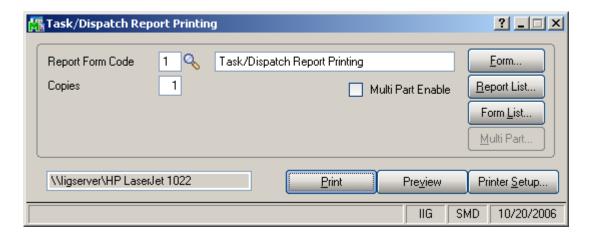
Check the **Include All Selected Dispatches** box to include all the dispatches satisfying dispatch specific selections unaffected by the line specific selections.

You can select to include **Task/Dispatches** that are Active, From History, or Both.

Click the **Proceed** button to fill the list with the records satisfying your selections. You can view this list by clicking List View. The program will print the records selected with the Proceed button, and disregard any filter changes made after last Proceed.

Click the **List View** button to review the records you have selected during last Proceed, in the Task/Dispatch Work Tables screen.

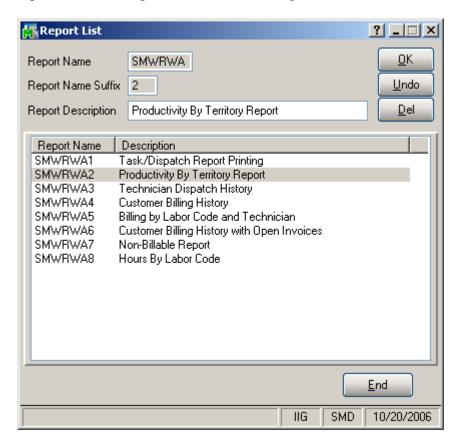
Click the **Print** button to open the **Task/Dispatch Report Printing** screen.



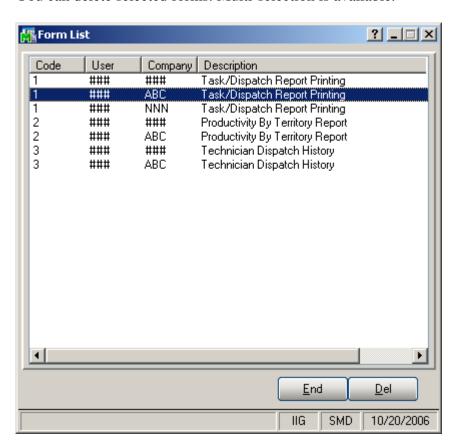
Select **Report Form Code** and number of **Copies**.

Click the **Form** button to edit the form.

Click the **Report List** button to view the list of existing reports, add new reports and delete existing ones.

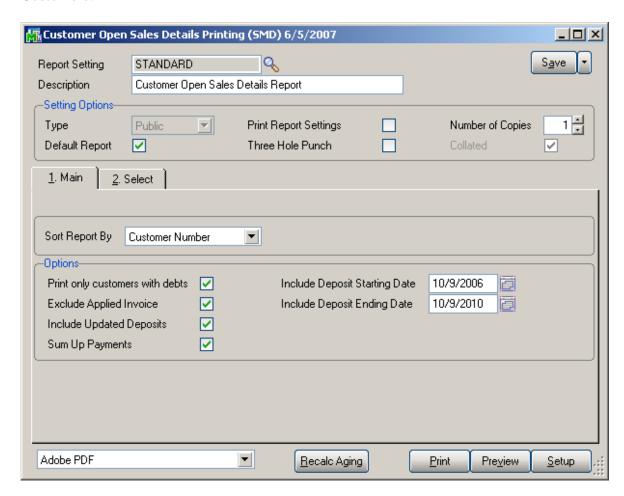


Click the **Form List** button to view the list of existing forms. You can delete selected forms. Multi-selection is available.

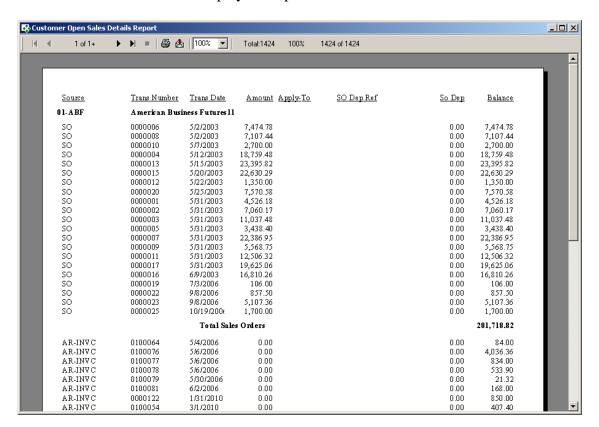


## Customer Open Sales Details Report

The Customer Open Sales Details Report prints expected payments and deposits information for the selected Customers.

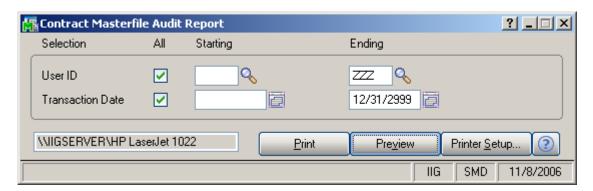


Click the Preview button to display the report

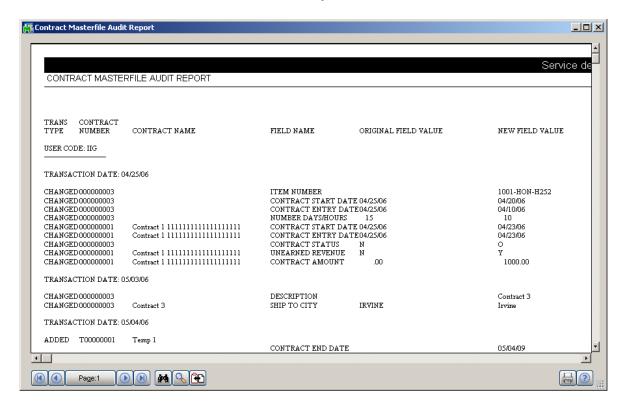


## Contract Masterfile Audit Report

The Contract Masterfile Audit Report prints the contract changing information according to the Track Contract Masterfile Changes setting in the Service Management Options.

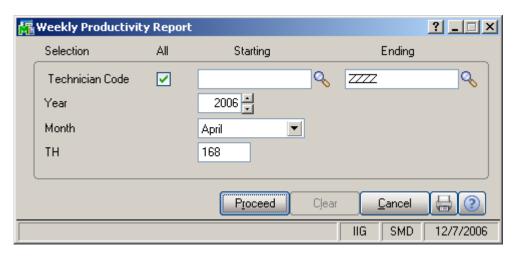


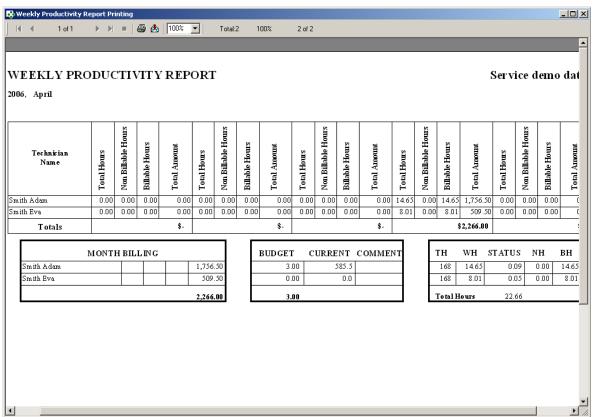
Selection can be done by **Transaction Date** and **User ID** (or Terminal ID, if there is no user defined in the system).



## Weekly Productivity Report

The **Weekly Productivity Report** prints the billing of the techniques.

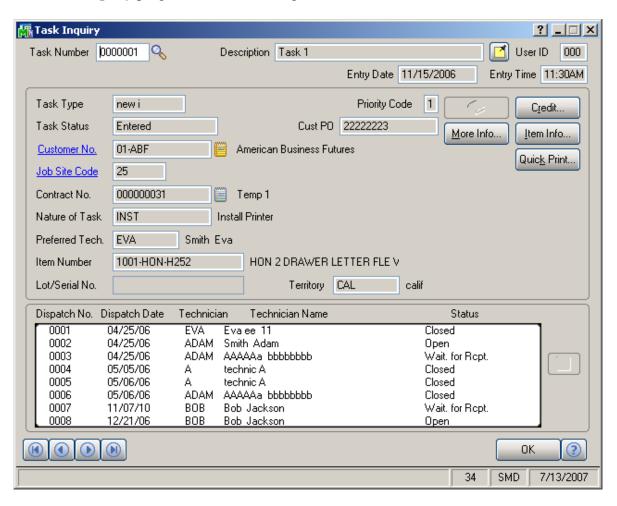




## The Inquiries Menu

## Task Inquiry

The **Task Inquiry** program enables viewing the active tasks.



You can use the buttons to view the additional information on the selected task.

Select a Dispatch in the dispatches list, and click the **Drill Down** button to view the **Dispatch Inquiry** screen.

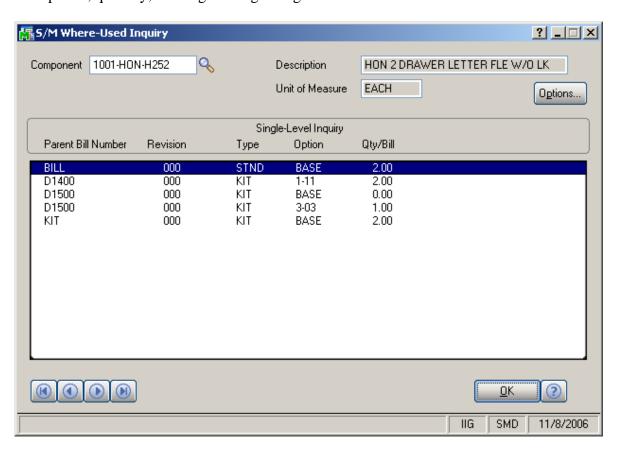
## Task History Inquiry

The **Task History Inquiry** screen is used to locate and view tasks that have been closed.



## Component Where-Used Inquiry

Use **Where-Used Inquiry** to display a complete list of all bills on which a specific item is a component. Included in the review are the parent bill number, revision code, bill type, bill options, quantity, and engineering change dates.



For each component item number entered, you can designate the type of inquiry. The following are three types of available Where-Used inquiries:

- Single-level Where-Used
- Indented Where-Used
- Summarized Where-Used

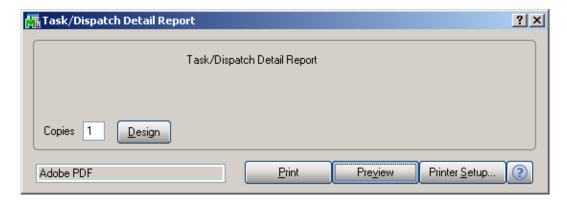
Click the **Options** button to select the type of inquiry.



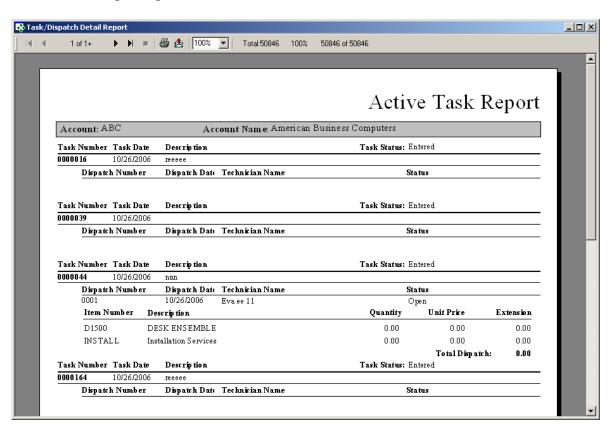
## **The Custom Reports Menu**

## Task/Dispatch Detail Report

The **Task/Dispatch Detail Report** prints Task/Dispatch information. If the task includes dispatches, then they will also be printed.



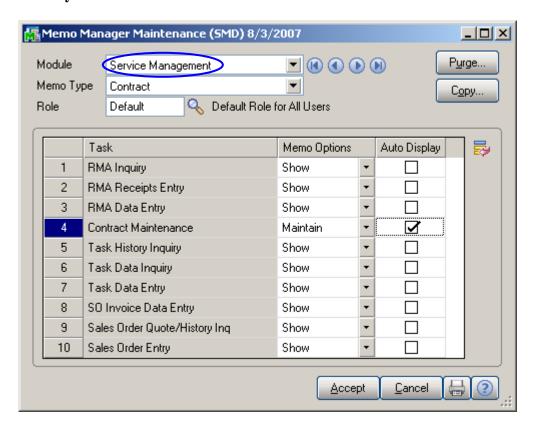
Here is an example of printout:



# Modules and Programs in MAS 90 Modified for Service Management

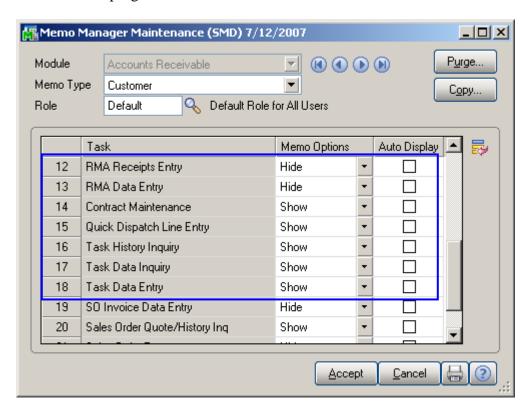
## Library Master Memo Manager Maintenance

**Service Management** module with **Contract** type has been added to the **Memo Manager Maintenance** program of **Library Master**.



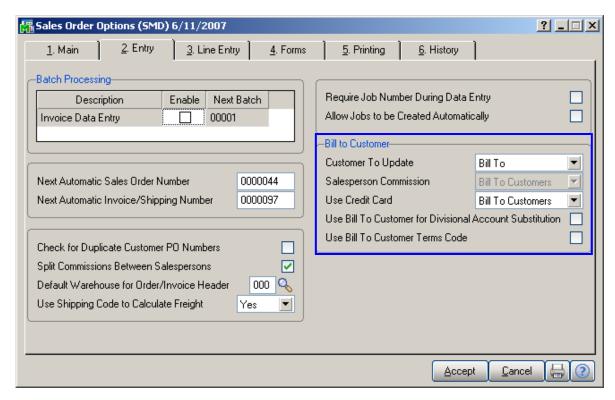
## A/R Memo Manager Maintenance

The RMA Inquiry, RMA Receipts Entry, RMA Data Entry, Contract Maintenance, Quick Dispatch Line Entry, Task History Inquiry, Task Data Inquiry and Task Data Entry tasks have been added to the Memo Manager Maintenance program of Accounts Receivable.



## Sales Order Options

New options have been added to the **Entry** tab for **Bill To Customer** processing in the **Sales Order Options** affecting both **Sales Order** and **Accounts Receivable** modules.



Set **Bill To** in the **Customer To Update** field if you want the postings to be updated for Bill To Customer only, or set it to **Bill To and Ship To**, if you want the postings to be updated for both.

If the **Bill To and Ship To** is selected, you can choose to set **Salesperson Commission** to **Bill To Customers** or **Ship To Customers**.

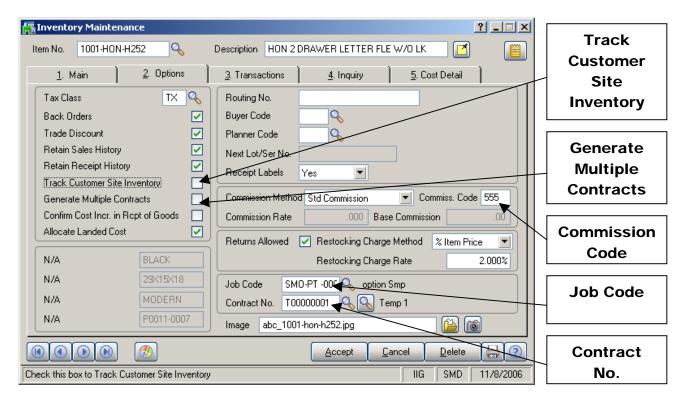
You can choose to **Use Credit Card** of **Bill To Customers** or **Ship To Customers**, independent of other settings.

Check the **Use Bill To Customer for Divisional Account Substitution** box if you want to use the accounts set for the Division of the Bill To Customer.

Check the **Use Bill To Customer Terms Code** box if you want to use the **Terms Code** set for the Bill To Customer.

## Inventory Maintenance

The following fields have been added to the **Options** tab of the **Inventory Maintenance** screen.



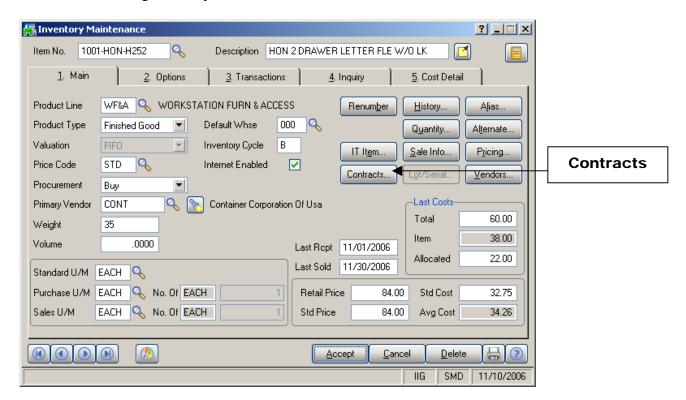
Check the **Track Customer Site Inventory** box to track if the item has been sold to the Customer, for being able to check it when entering item for the task.

If the **Generate Multiple Contracts** box is selected, use the **Contract No.** field to enter a **Template Contract Number** or select it from the Lookup. Separate contracts will be generated automatically for each unit when selling the item.

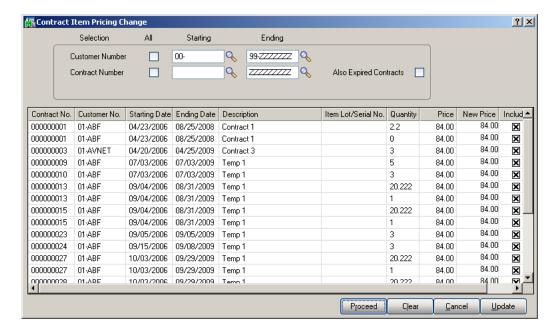
If Commission Code is set up to the item and that item has been used in SO, then Commission Method is determined by the pair of Salesperson Code of the invoice header and Commission Code of the Item, in other words by the corresponding line of the Salesperson Maintenance. If there is no such line for that item, then calculation is done by standard.

Use the **Job Code** field to enter the desired Job Code for a given item. Whenever the item is sold against a contract,

appropriate costing and billing information will be posted to the contract file, organized by Job Code.



The **Contracts...** button, added on the **Main** tab, displays the **Contract Item Pricing Change** screen.

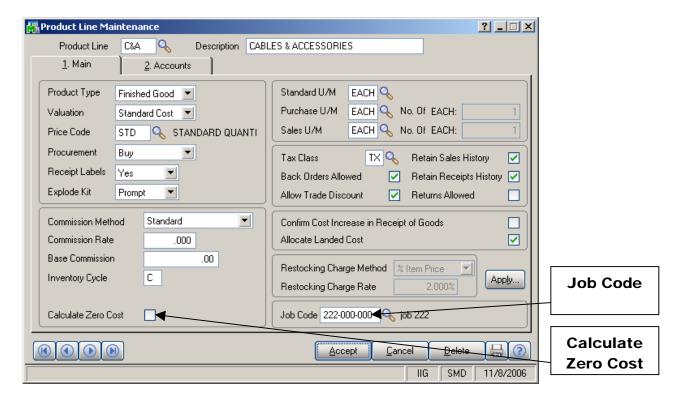


## Service Management 4.10

238

Click **Proceed** to load records in the grid according to the selections. Click **Update** to apply the changed **Prices**.

#### Product Line Maintenance



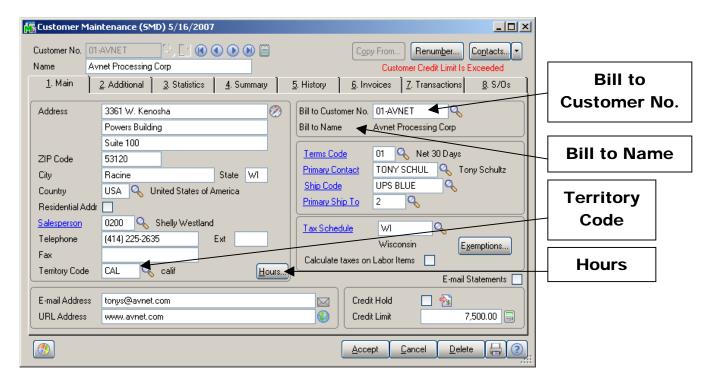
Use the **Job Code** field to enter the desired Job Code for a given product line. Whenever items from this product line will be sold against a contract, appropriate costing and billing information will be posted to the Contract File, organized by Job Code.

The program will search for Job Codes based on priorities. It will search first in the Inventory Master File, then in the Product Line Master File. If the system fails to find Job Codes in either of these master files, then it will use a **Material Job Code** from the **Service Management Options** program.

Check the **Calculate Zero Cost** box to have the programs calculate commission on invoice lines with zero cost. Available only when **Commission Processing** is activated in **Service Management Options**.

#### Customer Maintenance

The **Territory Code** field and the **Hours** button have been added under the **Main** tab in the **Customer Maintenance** screen.



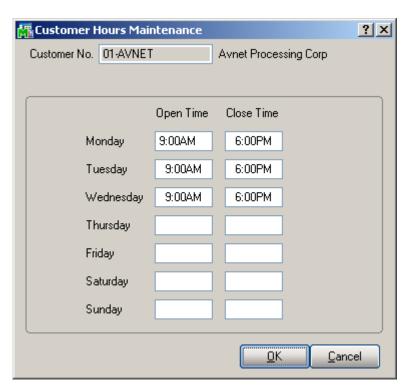
**Bill to Customer No.** by default displays the same selected customer number. Enter different customer number or select it from the lookup list.

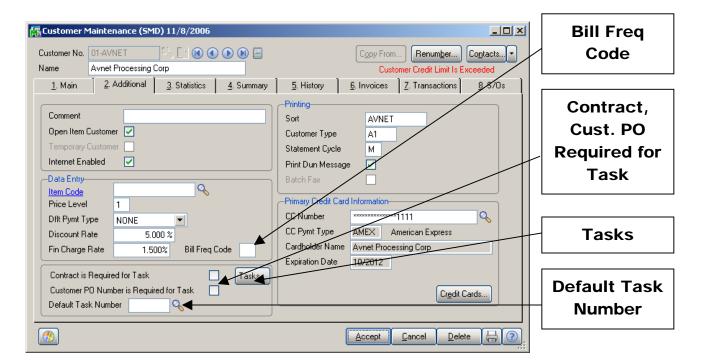
The **Bill To Customer** information is included in the **Customer Listing** printout.

The **Bill to Name** field displays the description of the Bill to Customer.

The **Territory Code** can be entered from the **Main** tab when the customer does not have several **Ship To Addresses.** The **Territory Code** also can be entered form the **Customer Ship To Address** portion of the **Customer Maintenance** screen. Together with the **Territory Code** in the **Technician Master File**, this code can be used to filter out the tasks that can be dispatched to a given technician.

Use the **Hours** button to enter the **Customer Ship to Hours** screen to maintain the daily opening and closing times for the customer job site. These hours can be viewed during **Task Data Entry** and **Dispatch Data Entry**.





Enter a letter or number for the **Bill Frequency Code** to denote a scheme of Billing Frequency.

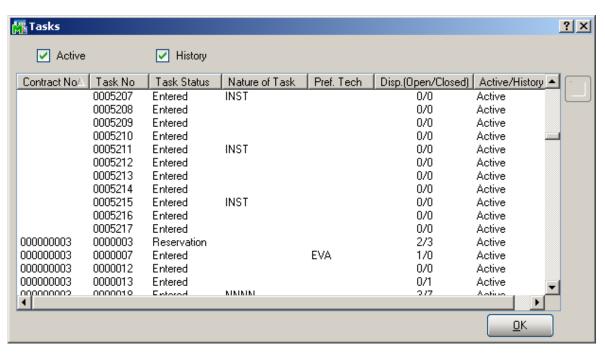
The Contract and Customer PO Number is Required for Task check boxes have been added to the Additional tab of the Customer Maintenance screen.

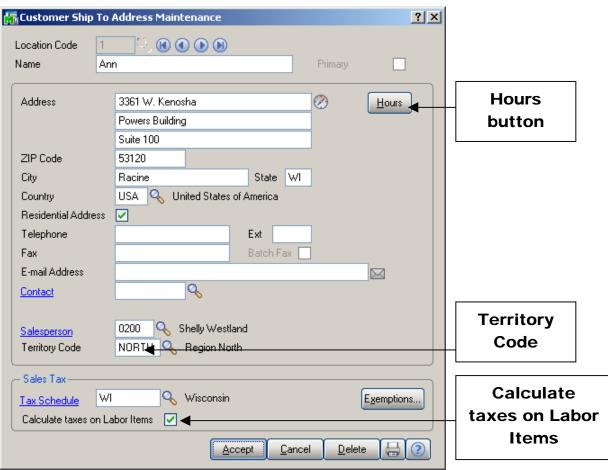
When one of the boxes is checked, the program will not accept Task Entries without **Contract** or **Customer PO** specified, correspondingly.

You can select the **Default Task Number** to be displayed automatically when selecting the customer in the **Quick Dispatch Line Entry** program.

Click the **Tasks** button to view the tasks of the customer. You can select to display or not **Active** tasks and tasks from **History**.

On the **Tasks** screen, the **Task Zoom** button displays the **Task Inquiry** screen for the selected **Active** task or the **Task History Inquiry** if the task is from **History**.





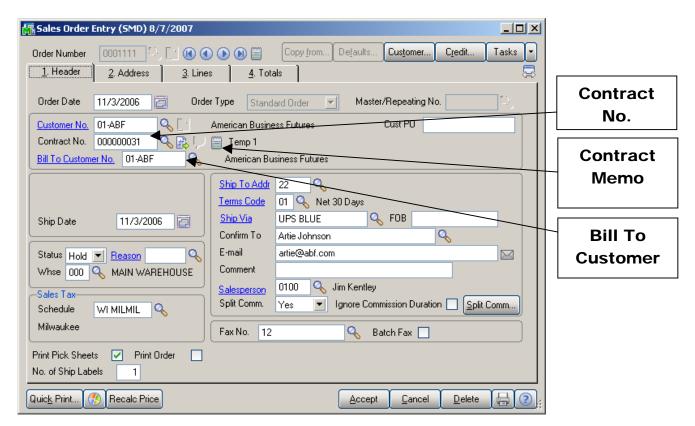
The **Territory Code** field has been added to the **Customer Ship To Address** portion of the **Customer Maintenance** screen. In conjunction with the **Territory Code** in the **Technician Master File**, this code can be used to filter out the tasks that can be dispatched to a given technician.

Use the **Hours** button to enter the **Customer Ship to Hours** screen to maintain the daily opening and closing times for the customer job site. These hours can be viewed during **Task Data Entry** and **Dispatch Data Entry**.

Check the Calculate taxes on Labor box to use the Tax Classes on Dispatch Lines, when the Ship to Address is selected for the task. This option is unavailable if the Calculate taxes on Labor is set to No.

## Sales Order Entry

Here are the changes on the **Sales Order Entry** screen.



The **Bill To Customer No.** field displays the customer number set in the **Customer Maintenance** program. You can select a different Bill To Customer for the current order.

Use the **Contract No.** field to enter a **Contract Number** in order to sell items against that contract. Any existing contract can be selected using the **Lookup** button (the Template contracts are not displayed in the lookup).

Click the **Contract Memo** button to specify Memo for current customer.

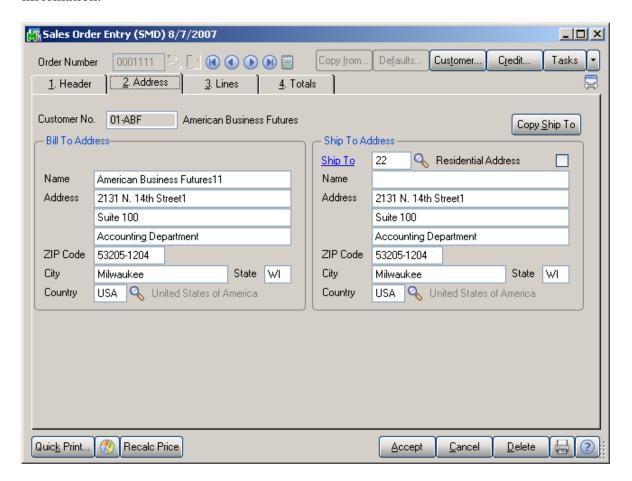
You can also create a new contract clicking the **Next Contract No.** button.

The Contract Options screen is opened to allow setting the All Materials Are Covered, All Labor Is Covered options and enter Contract Total Amount.

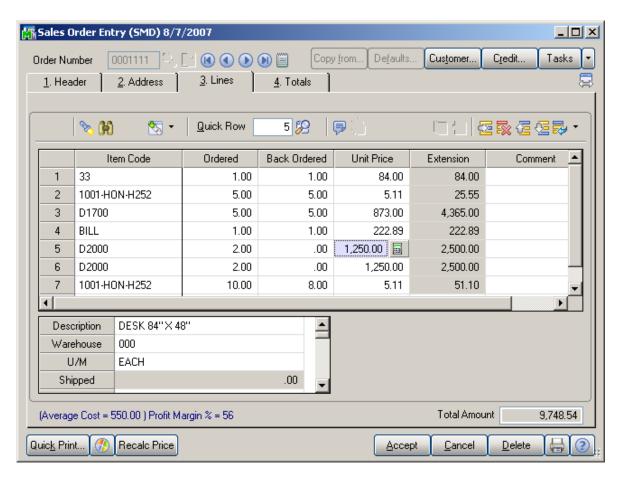


Note that attached contract can be changed for each item separately. If the **Use Item contract instead of Order Contract** box is checked in the **Service Management Options** program, items generating tasks will have attached contracts specified for them in the **Inventory Maintenance** program.

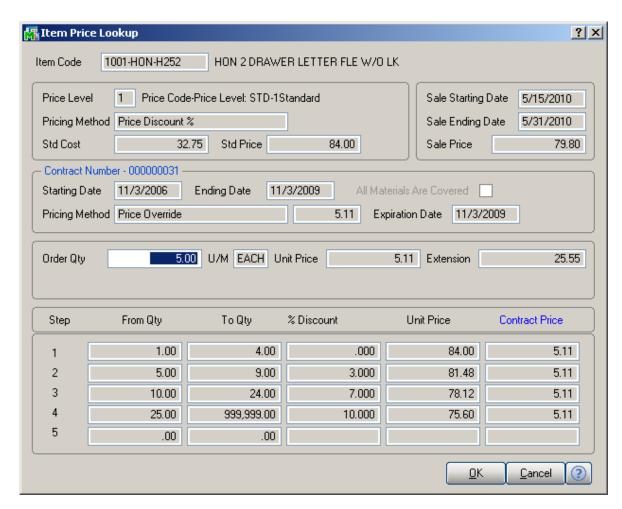
The **Address** tab includes the Bill To Customer Address information.



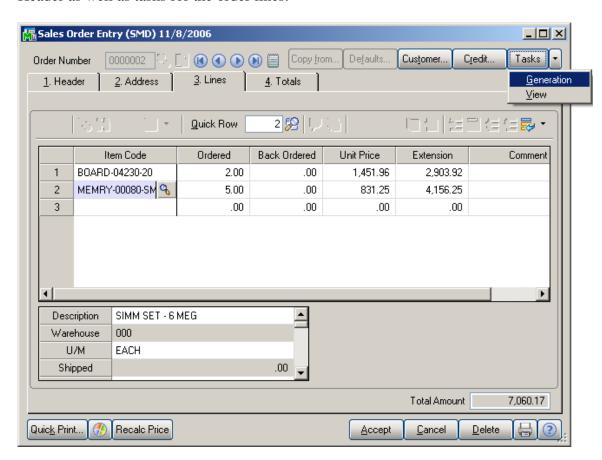
The program displaying Credit information checks the Credit Limit for the Bill To Customer instead of the main (Ship To) Customer. Select a line on the **Lines** tab of the **Sales Order Entry** screen. Click in the **Unit Price** field to see the **Average Cost** information in the status line at the bottom of the screen.



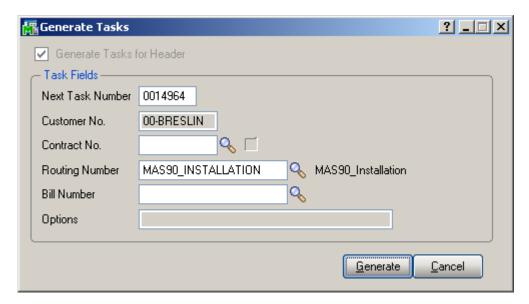
The **Item Price Lookup** screen opened from the **Lines** tab of **Sales Order Entry** has been modified to display **Contract Price** for all the **Steps**, if there is **Contract** on the Sales Order and the selected Item has Price specified on the **Item Prices** tab of that Contract.



**Generation** allows generating tasks for the Sales Order Header as well as tasks for the order lines.



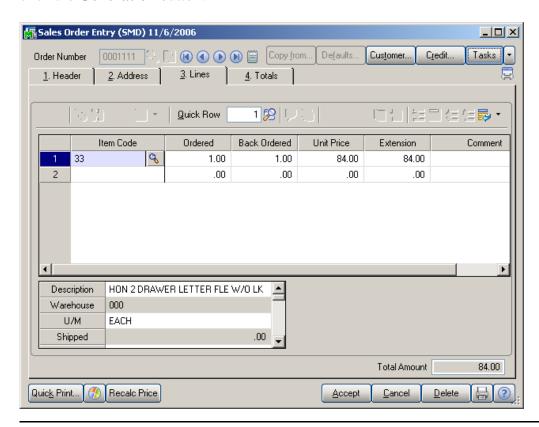
For generating a task for Header, click the **Generation** button. The **Generate Tasks** screen will be displayed with the selected **Generate Tasks For Header** check box. In the **Task Fields** section, you can change the **Next Task Number**, **Contract No.** for the generating tasks.



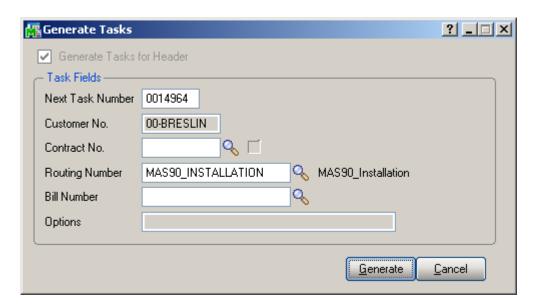
When the **Routing Number** is specified, tasks will be generated for those steps of that routing, which have the **Generate Task** checked in the **Routing Maintenance**.

In the **Lines** tab, tasks can be generated only for order lines with miscellaneous or special items.

Enter the miscellaneous/special items, select the line and click the **Generation** button.



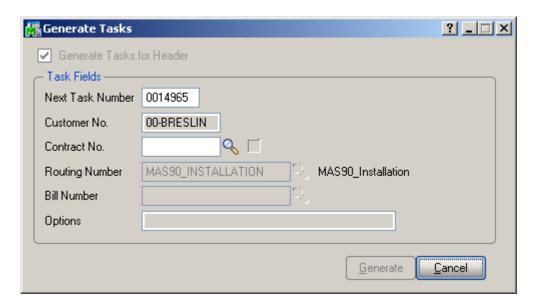
In the Generate Tasks screen, the Generate Tasks for Header is checked.



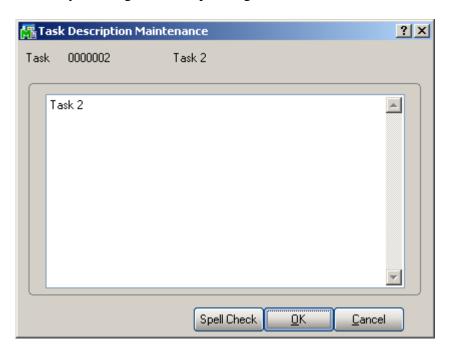
Tasks can be generated with Routing or Billing (when both the **Routing Number** and **Bill Number** fields are empty, the **Generate** button will be disabled). If you select a Routing Number and click the **Generate** button, that Routing will be used when generating tasks.

If you select a Bill Number, the **Options Selection** screen will be displayed, where you can change options. Now you can generate tasks with the selected Bill Number.

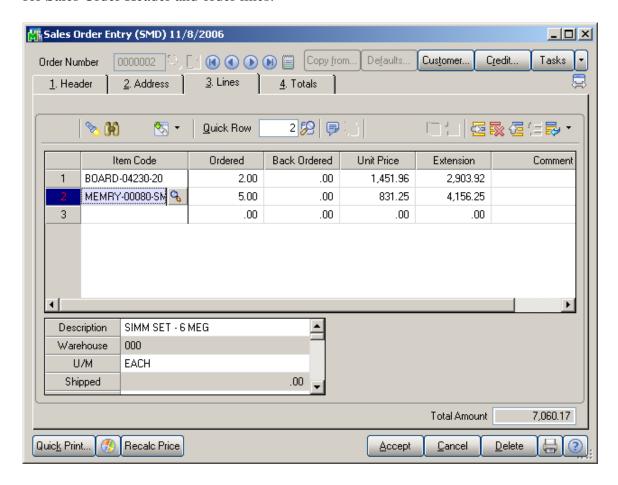
Once tasks are generated, this operation cannot be repeated, but the method of generation applied to a special item can be viewed. Click the **Generate** button to open the **Generate Tasks** screen. The fields are now display-only (the same is correct when tasks are generated for Header).



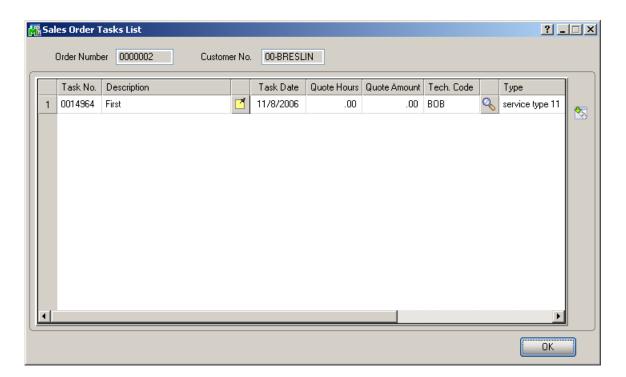
The Number of Special or Miscellaneous Item from which a task was generated is written in the Extended Task Description. It can be viewed from the Task Data Entry screen by clicking the corresponding button.



You can change the information related to the tasks generated for Sales Order Header and order lines.

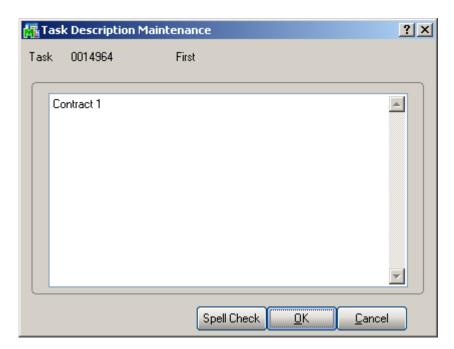


Click the **Tasks** button to display the **Sales Order Tasks List** screen.



The **Task** # and **Task Date** are display-only fields.

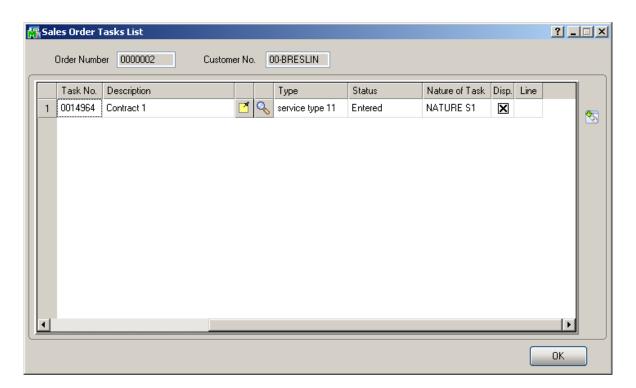
You can edit **Description** and open for editing **Task Description Maintenance** using the corresponding button.



The **Quote Hours** and **Quote Amount** fields for generated tasks can be entered from this screen.

If you are trying to change Quotes for a task in use, the following message will be displayed: "Record is Busy".

The **Technician Code** can be typed in directly or selected from the list by clicking the Lookup button. Another Lookup button will appear with the list of technicians with preferred skills for performing the task.



The **Type**, **Status**, **Nature of Task** fields are display-only.

If a task has dispatches, there is a checkmark in its **Disp.** column.

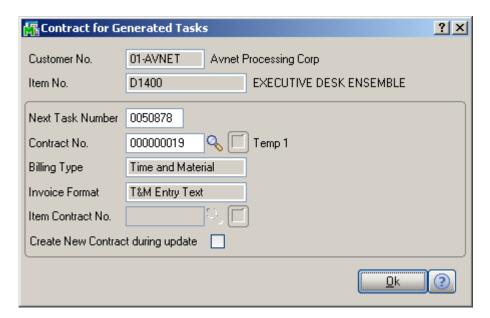
The **Line** column shows the line number of the line for which the task is generated, or it is empty when the tasks are generated for the Sales Order Header.

You can use the **Task Zoom** button to open the **Task Inquiry** screen to view the selected task information.



If the item being entered has a Bill of Materials, and that Bill of Materials has Routing with steps marked as generating tasks, so tasks will be generated at the moment the line is accepted. The program can also generate contract for these newly created tasks.

For items with Bill of Materials, after clicking the **OK** button to accept the line, the **Contract for Generated Tasks** screen is displayed.



The Contract Number field displays the Contract Number specified in the Header tab of the Sales Order. If the Use Item contract instead of Order contract box is checked in the Service Management Options program, the contract set for the item in the Inventory Maintenance program will be used instead of the contract of the Sales Order. In this case, the Create New Contract during update box will be cleared automatically, and the Item Contract Number field will be disabled. If the Contract Number is a number of a template contract, or it is the number of the contract specified for the item in the Inventory Maintenance program, a new contract will be created at the moment of clicking the Ok button. The specified Contract Number will be assigned to the generated Task. The generated contract will have the Total Amount equal to the Extension of the Line.

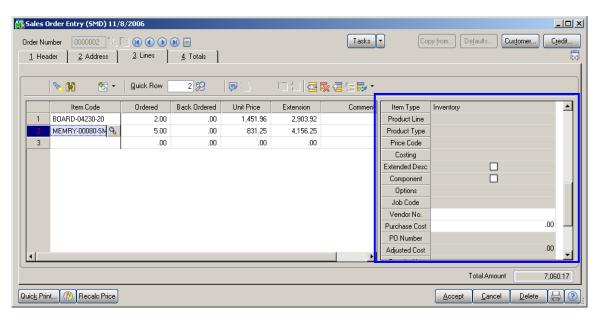
At the bottom of the **Lines** tab of the **Sales Order Entry** screen displays additional information for the selected Line. The view will be changed when clicking the **Change View** button.

The following fields are visible only for regular items, not generated from the labor lines of dispatch.

Vendor No and Purchasing Cost set in the Inventory Maintenance can be changed here for the selected line. After generating Purchase Order in the Auto Generate Orders Selection program, the PO Number is displayed. The Adjusted Cost displays the cost of receiving along with the Receipt Number, after updating corresponding Receipt of Goods.

If the specified **Purchase Cost** exceeds the Price, the following warning is displayed:





The Create Contract, Generate Multiple Contracts, and Item Contract fields display the settings of the Contract for Generated Tasks screen for the Items having Bill of

Materials, and the settings of the Inventory Maintenance screen for all other items.

If no contract is specified for the item, the **Create new Contract during update** box is cleared. It can be checked, and then a Contract number can be selected in the **Item Contract** field.

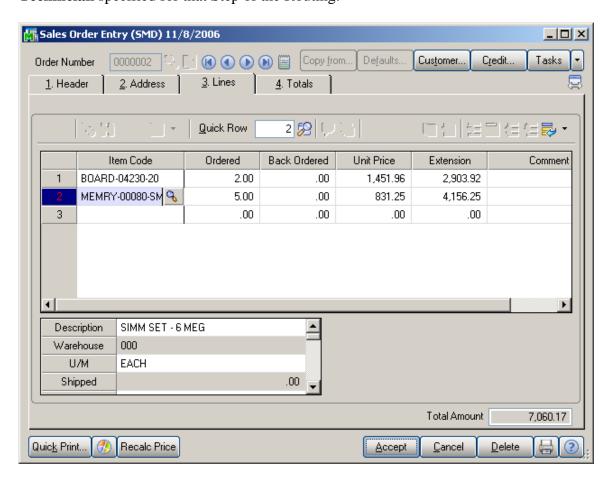
The Contract number in the **Item Contract** field can be changed to generate a contract other than specified in the Inventory Maintenance.

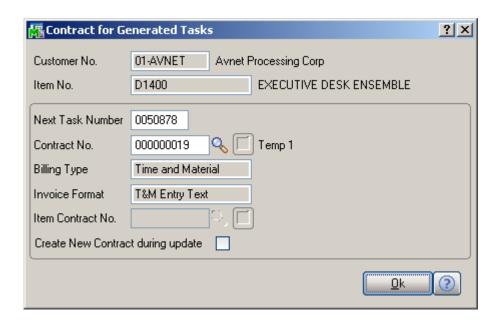
Check the **Generate Multiple Contracts** box to generate separate contract for each unit. (In this case, the number of generated contracts will be equal to the Quantity Ordered of the Line.)

According to the **Contract Bill Item** check box it is determined to which contract the Invoice will be billed to during Invoice update. If the check box is selected for entire line, the Invoice will be billed to current Item's generating contract.

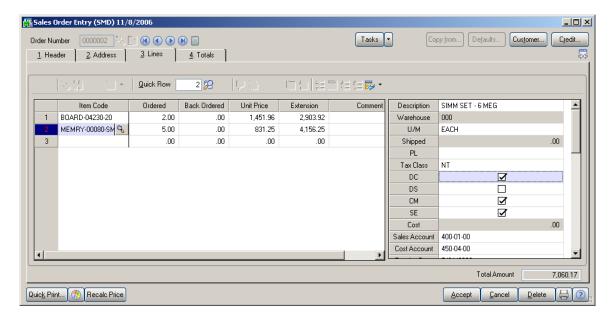
These tasks might be viewed and dispatched further in Service Management's Task Data Entry and Dispatch Data Entry programs.

When a **Bill Item** with **Routing** having **Manufacturing Step** is entered in a Sales Order, after Task is created for it, Dispatch is created under that Task, and Labor Charge line is created in that Dispatch, with the **Labor/Skill** and **Technician** specified for that Step of the Routing.

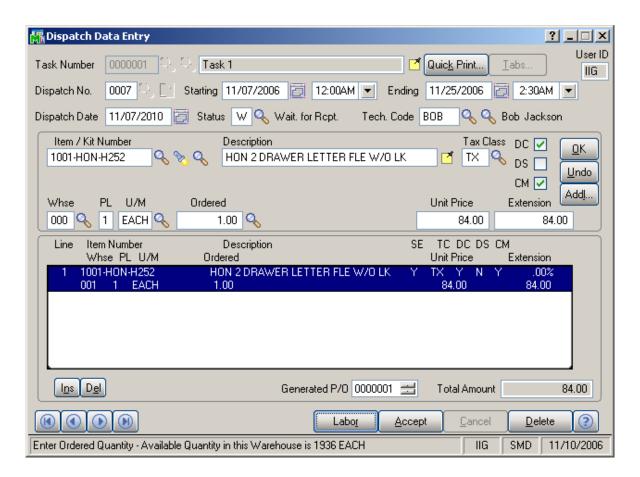


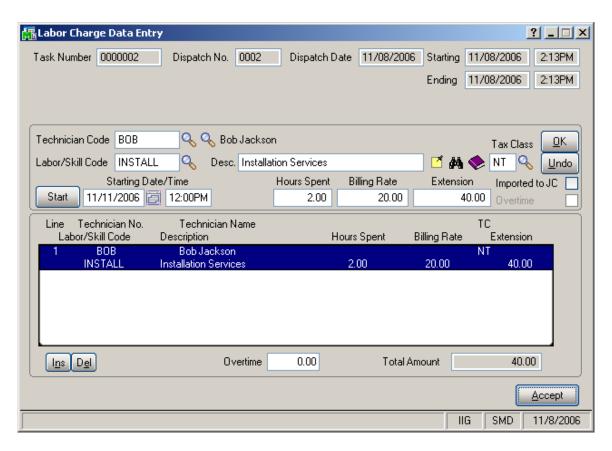


Here are the Tasks generated for the Bill Items:

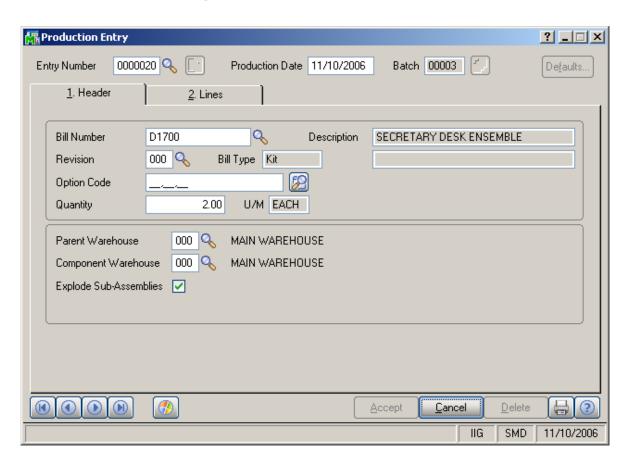


Here is the Dispatch generated for the Manufacturing Step:

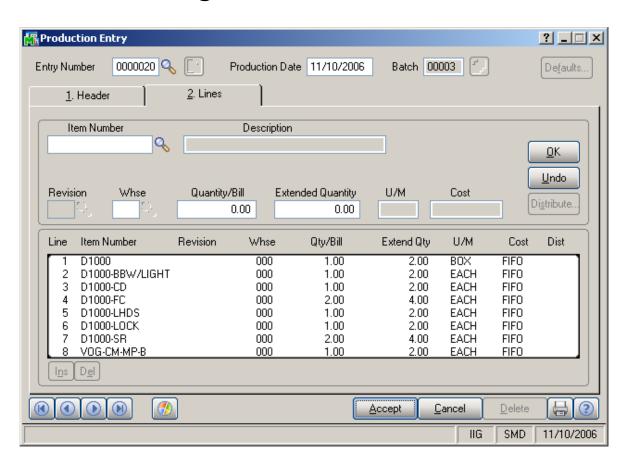




When Manufacturing Dispatch is Closed, the program displays the Production Entry screen, with the Bill number and Quantity loaded.



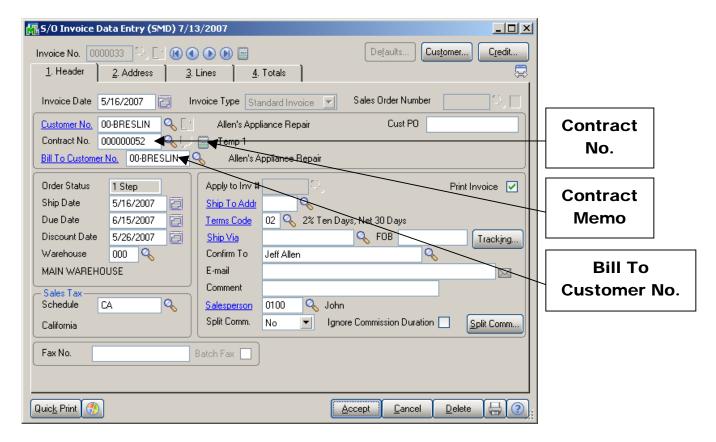
Indicate **Lot Number**, if the Bill is Lot Item, then go to the **Lines** tab, make distribution for Lot/Serial items, if any, and finish creating Production entry with the **Accept** button.



No **Sales Order** or **Invoice** is generated for **Manufacturing Dispatches** during Dispatch **Closing**.

If Contract has been generated for the Task during generation in Sales Order, and that Contract has the same Lot Bill Item specified on its Header, the Lot Number specified in the Production Entry will be written on the Contract Header during Production Register.

## S/O Invoice Data Entry



The added **Bill To Customer No.** field displays the customer number set in the **Customer Maintenance** program. You can select a different Bill To Customer for the current invoice.

The **Address** tab includes the Bill To Customer Address information.

The program displaying Credit information checks the Credit Limit for the Bill To Customer instead of the main (Ship To) Customer.

Enter the **Contract Number** to sell items against that contract. Any existing contract can be selected using the **Lookup** button (the Template contracts are not displayed in the lookup).

Select Contract Memo for current Contract.

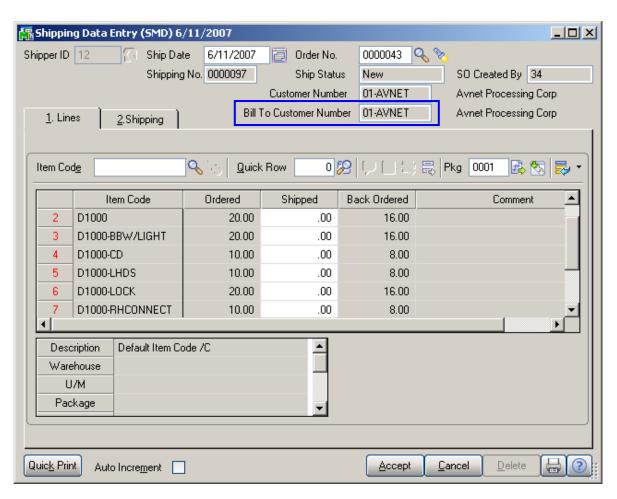
If the **Use Item contract instead of Order contract** box is selected in the **Service Management Options**, the contracts set for the items in the **Inventory Maintenance** program for the items will be used instead of the contract of the Sales Order (or Invoice) to generate contracts during invoice update.

These settings can be viewed in the **Additional Data Entry Fields** screen, which is opened on selecting the Line and clicking the **Addl...** button in the **Lines** tab.

The Create New Contract during update, Generate Multiple Contracts, and Item Contract fields work similar to the corresponding fields in the Sales Order Entry program.

## Shipping Data Entry

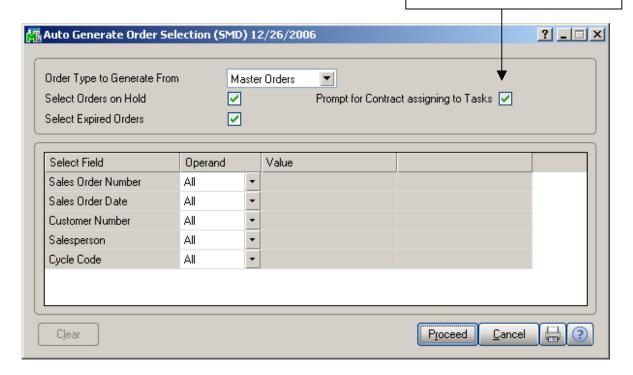
The **Bill To Customer Number** field has been added to the **Shipping Data Entry** screen. It displays the corresponding Bill To Customer Number set in the Sales Order.



The program checks the Credit Limit for the Bill To Customer instead of the main (Ship To) Customer.

### S/O Auto Generate Order Selection

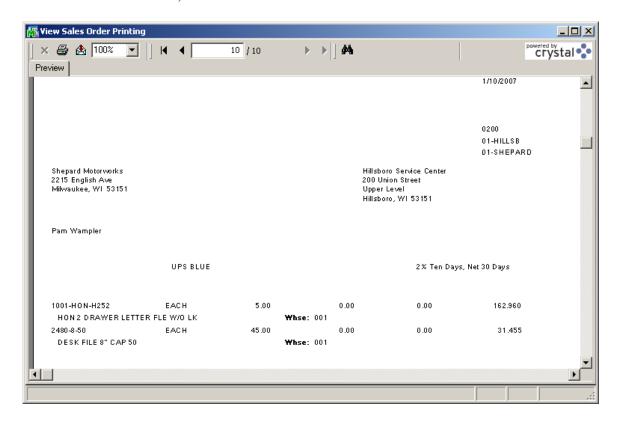
Prompt for Contract assigning to Tasks



Check the **Prompt for Contract assigning to Tasks** box to have the program display the **Contract for Generated Task** screen for each task generated for items of the generated orders. If the check box is cleared, contracts will be assigned to the tasks automatically.

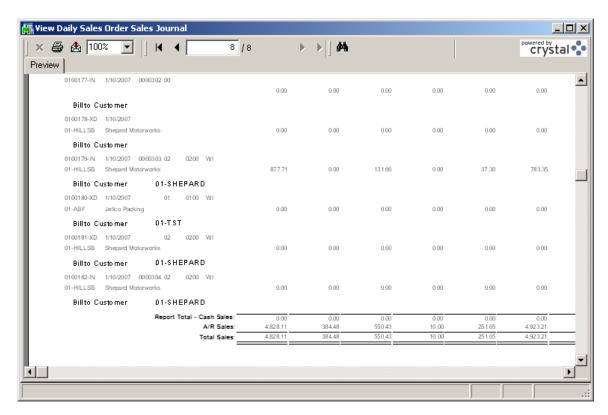
## Sales Order and Invoice Printings

Sales Order, S/O Invoice and A/R Invoice Printings (graphical Crystal reports) have been modified to include both Sold To and Ship To customers information, where Ship To is the main customer, and Sold To is the Bill To customer.



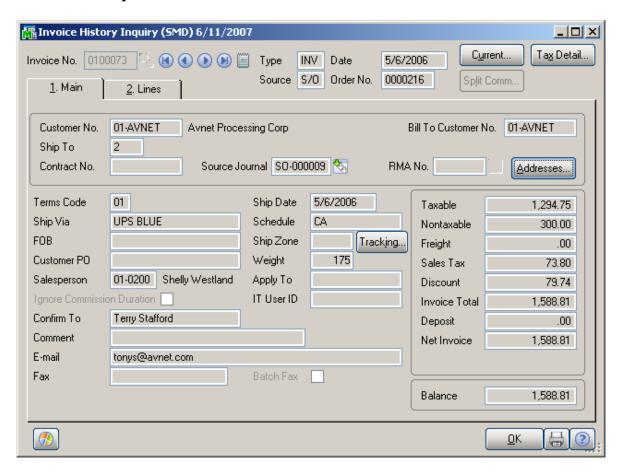
# S/O Sales Journal printing

The Bill To Customer is included in the Daily Sales Order Sales Journal printout.



## **Invoice History Inquiry**

After running **Daily Sales Reports/Updates**, you can view the invoice in the **Invoice History Inquiry** program under **Sales Order Inquiries** menu.



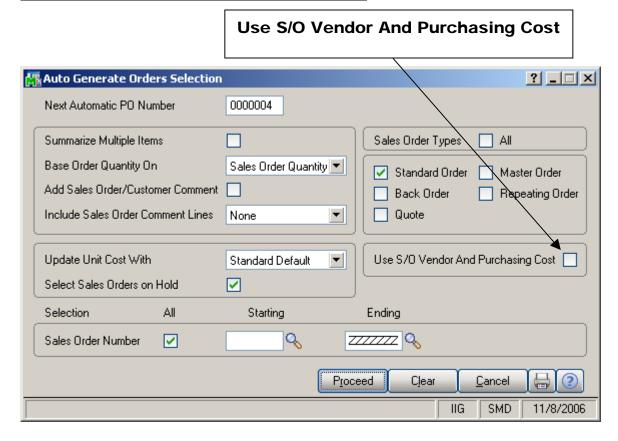
The **Bill To Customer No.** field displays the Bill To Customer Number.

Click the **Addresses** button to view the Bill To and Ship To addresses.

The Credit information is displayed for the Bill To Customer instead of the main (Ship To) Customer.

**Invoice History Printing** (graphical Crystal reports) has been modified to include the Bill To customer number.

### P/O Auto Generate Orders Selection



Check the **Use S/O Vendor And Purchasing Cost** box to have the **Vendor** and **Purchasing Cost** set in the Sales Order used instead of the settings in the **Inventory Maintenance** program.

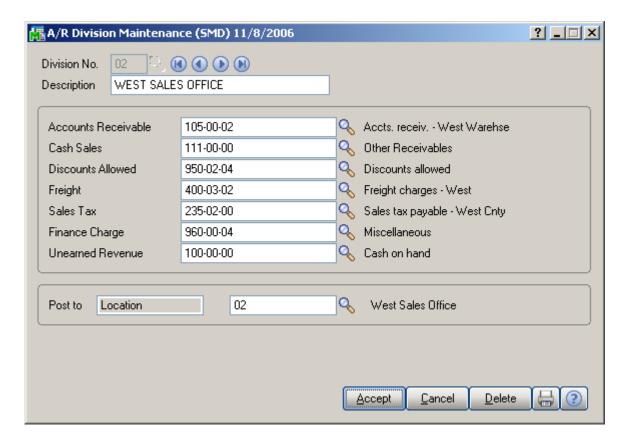
#### A/R Division Maintenance

Use Division Maintenance to organize your customer and invoice information by divisions. You can define up to 100 divisions by department, branch, or profit center. Additionally, each division can maintain its own Accounts Receivable and Discounts Allowed account numbers for posting to the general ledger. Amounts posted to each account reflect the activities for only that division. If you integrate the General Ledger module with Accounts Receivable, you can print the accounts receivable ending balance amounts for each profit center on your financial statements and other General Ledger reports.

Divisions affect the numbering of your customers. The division number precedes the customer number entered in Customer Maintenance and determines which general ledger accounts are posted to when an invoice or cash receipt is processed. Additionally, all reports containing customer invoice and payment information provide subtotals by division. The accounts posted to are based on the accounts specified in Division Maintenance.

If the Accounts Receivable Divisions check box is selected in the Accounts Receivable Options window, use Division Maintenance to assign a number and description to each division of your company. You also record the General Ledger account numbers transactions to post when invoices or cash receipts are processed for a customer within a specific division.

If the Accounts Receivable Divisions check box is cleared in the Accounts Receivable Options window, enter information for division 00 only. Division 00 cannot be deleted. You cannot post invoices, cash receipts, or finance charges if any General Ledger account numbers are blank. Click the Printer button to print a Division Listing.



Enter the **Division Number** from 01 to 99 representing the division you want to add or maintain.

Enter the **Description** for this division.

Enter the **Accounts Receivable** General Ledger account for this division. This entry must be a valid account number in the General Ledger account file.

Enter the **Cash Sales** account number for this division. This account is debited whenever you process a cash sale invoice.

Enter the **Discounts Allowed** account number for this division.

Enter the **Freight** account number for this division.

Enter the **Sales Tax** account number for this division. This option is available only if the Sales Tax Reporting check box is selected in Accounts Receivable Options.

Enter the **Finance Charge** account number for this division.

Enter the **Unearned Revenue** account number for this division. This account will be used for payments during task accomplishment, before task closing. When periods end, the amount will be transferred from this Unearned Revenue account to the account it was aimed for.

The **Retention Receivable** field also appears if Accounts Receivable is integrated with Job Cost.

Enter the Retention Receivable account for posting retention from job-related invoices and cash receipts. If you do not want to use a separate account for retention, specify the

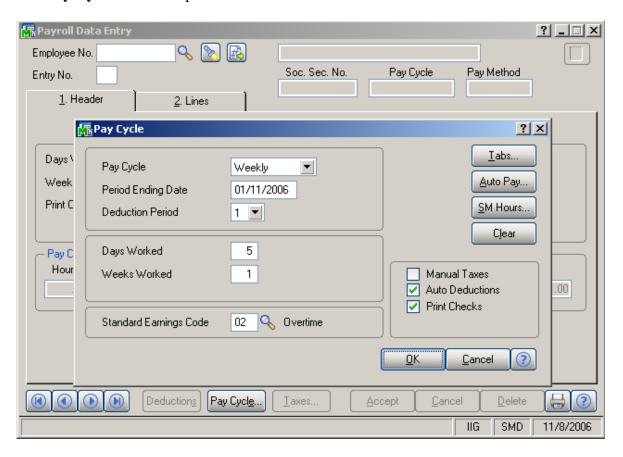
standard Accounts Receivable account to be used for retention posting. This field is available only if Accounts Receivable is integrated with Job Cost and the Track Job Cost Retention Receivables check box is selected in Accounts Receivable Options.

If you want divisional sales and cost of goods sold posting, enter a subaccount representing this division in the **Post to Sub G/L Acct** field. In some cases, the subaccount number and the division number are the same.

NOTE When performing Sales Code Maintenance, you can indicate whether sales items should be posted to a specific account number or to an account number with the subaccount inserted into the division segment. This option is not available if None is selected at the G/L Seg to Post A/R Sales option in Accounts Receivable Options.

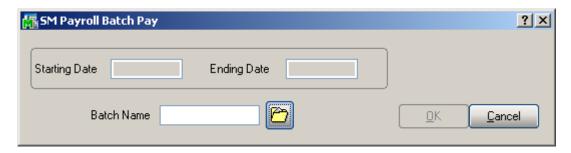
## Payroll Data Entry

Select **Payroll Data Entry** under the **Payroll Main** menu. The **Pay Cycle** screen is opened.



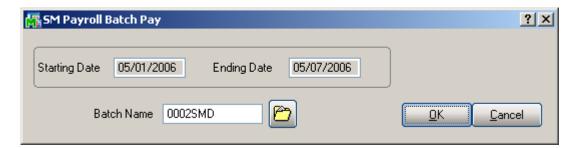
Select Weekly in the **Pay Cycle** field and click the **SM Hours** button.

This feature allows user to fill in the hours from the **Payroll Batch** entered in the **Service Management** module. (See the **Payroll Batch Entry** section in this manual.)

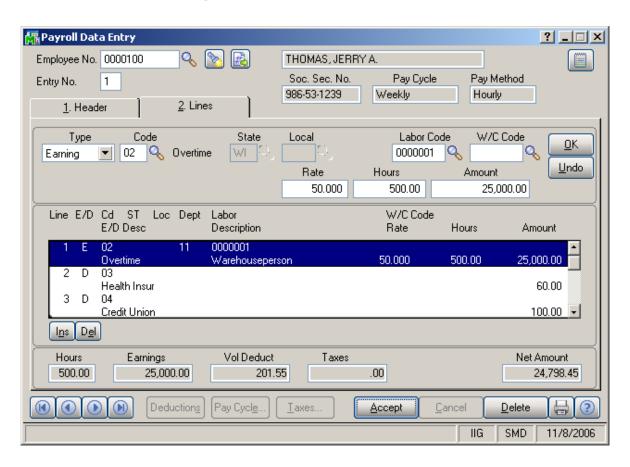


Click the **Open Batch** button.

Select the batch created in the Payroll Batch Entry.



Click **OK** to generate **Payroll Data Entries** for the Employees in the batch.



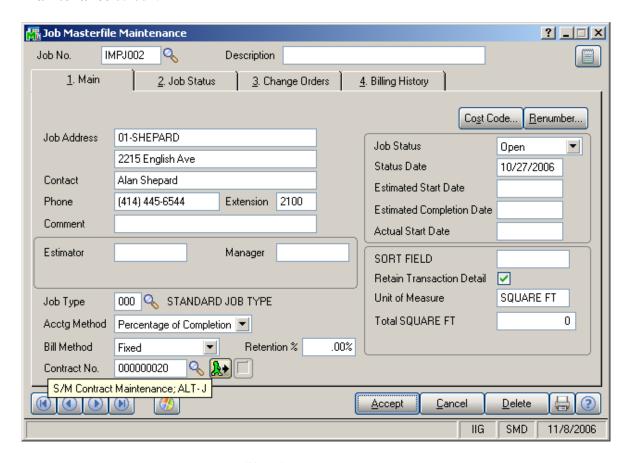
If the generated Payroll Data Entries are **Cleared** in the **Pay Cycle** program, the corresponding batch will be restored from the history.



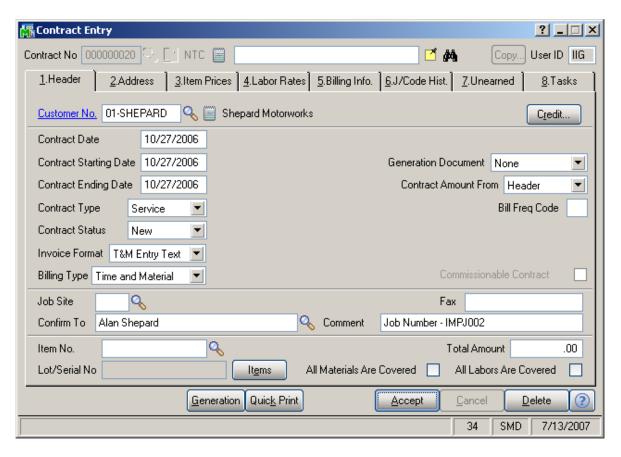
# **Job Cost Integration**

### Job Masterfile Maintenance

The **Contract No.** field has been moved and replaced with the **S/M Contract No.** field on the **Job Masterfile Maintenance** screen.



When entering new **Job**, click the **S/M Contract Maintenance** button to create **Contract** with the automatically assigned **Next Number**. The **Contract Maintenance** screen will be opened opened.



The **Customer** is taken from the **Job**, and the **Comment** displays the originating **Job Number**.

Enter other necessary information for the contract and accept it.

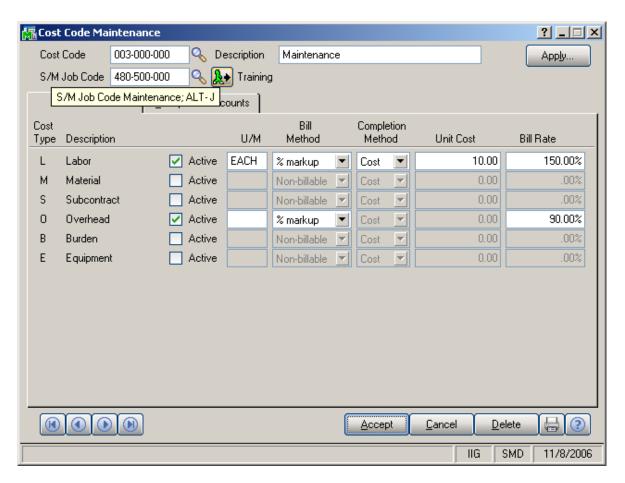
After the new contract is accepted, the program returns to the **Job Masterfile Maintenance** and automatically loads the newly created **Contract Number** in the **Contract No.** field.

You can select any existing Contract from the lookup.

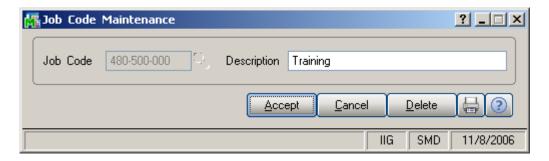
When a contract is selected in the **Contract No.** field, click the **S/M Contract Maintenance** button to open the selected contract.

### Cost Code Maintenance

The S/M Job Code field has been added on the Cost Code Maintenance screen.



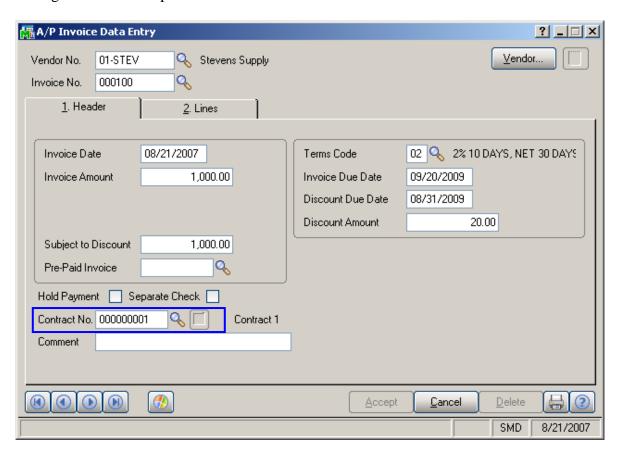
Click the S/M Job Code Maintenance button to open the Job Code Maintenance suggesting new Job Code corresponding to the Cost Code:



After the new Job Code is accepted, the program returns to the **Cost Code Maintenance** and automatically loads the newly created **Job Code** in the **S/M Job Code** field.

### A/P Invoice Data Entry

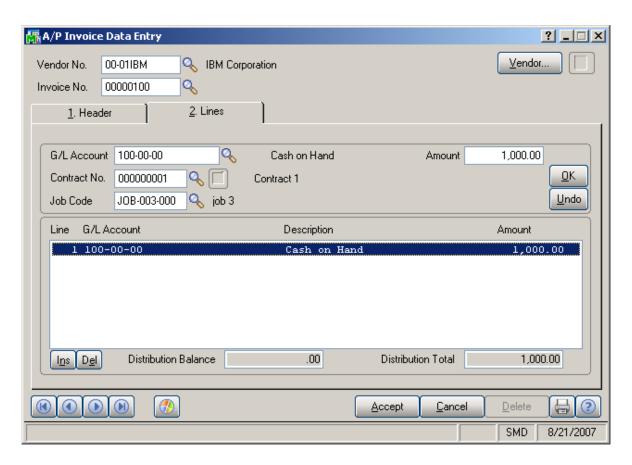
The **Contract Number** field has been added on the **A/P Invoice Data Entry Header** screen. This default value will be used for the invoice lines entered for Job Numbers not having S/M Contract specified.



Cost information of invoice line is stored on the S/M Contract specified on the Job Number and S/M Job Code specified on the Cost Code selected for that line.

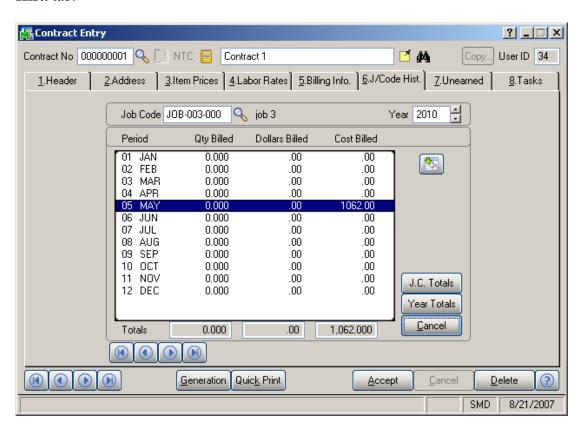
If the invoice line's **Job Number** does not have **S/M Contract** specified, default values of the Invoice **Header** will be used.

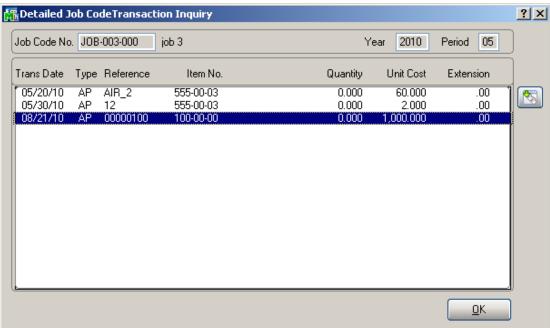
If the selected **Cost Code** does not have **S/M Job Code** specified, the default 000-000-000 will be used.



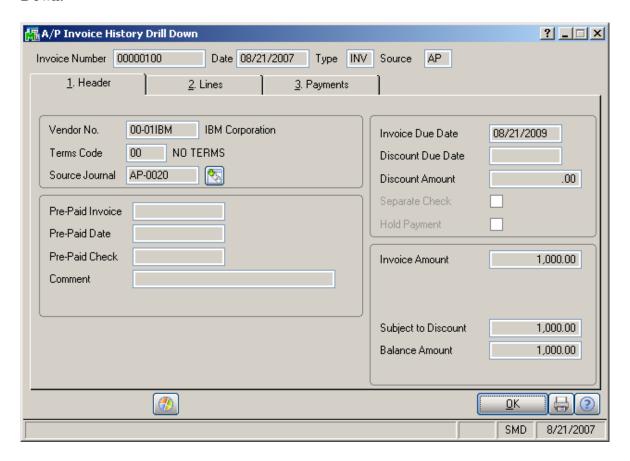
If there is no **JC** module installed and setup in the system, the **S/M Contract** and **Job Code** fields are displayed instead, and the SMP processing is activated.

The A/P information is displayed on the contract's **J/Code Hist.** tab.



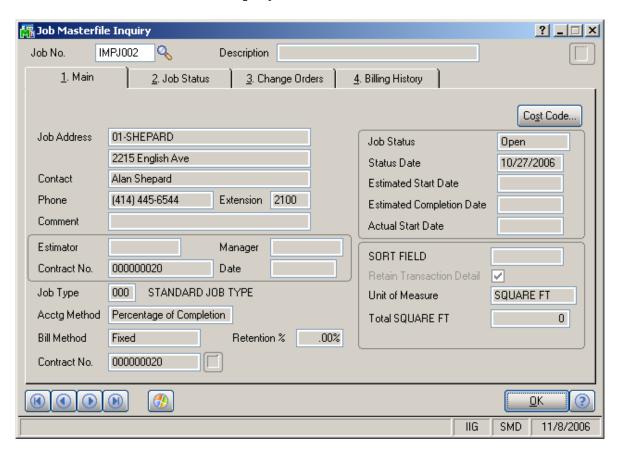


The details of the A/P Invoice can be viewed with the Drill Down.



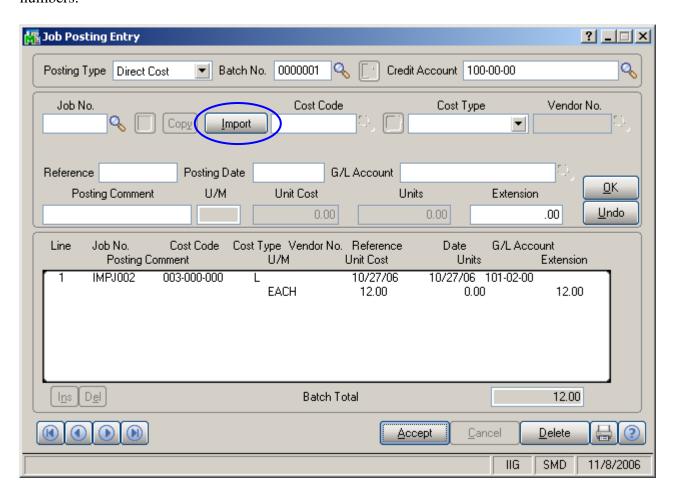
## Job Masterfile Inquiry

The Contract No. field has been modified to S/M Contract No. field on the Job Masterfile Inquiry screen.

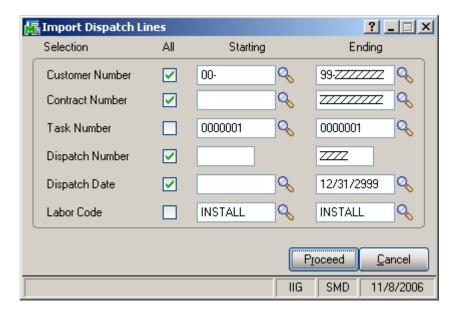


## Job Posting Entry

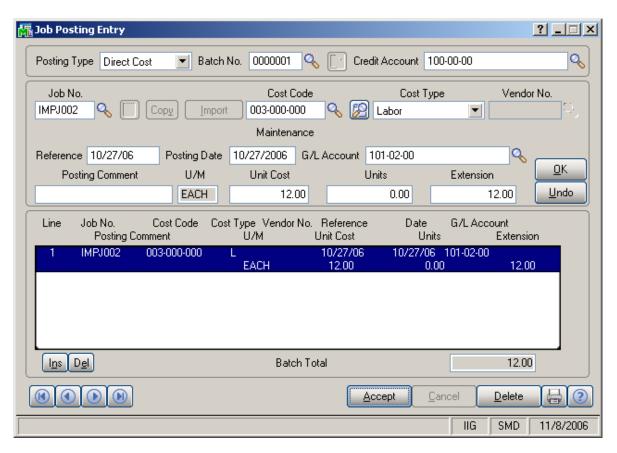
The **Import** button has been added to the **Job Posting Entry** screen. To enable this button, select **Direct Cost** as **Posting type**, specify the **Batch No**. and **Credit G/L Account** numbers.



Click the **Import** button. The **Import Dispatch Lines** screen will be displayed, where it is possible to specify the selection criteria: range of customer numbers, contract numbers, task and dispatch numbers, dates, and labor codes.



After making the selection and clicking the **Proceed** button, the Service Management information (Customer, Contract, Task, Dispatch, Date and Labor information) will be processed and loaded as **Job Posting Entry** lines.



The **Unit Cost** is set to the **Labor Cost** (for a given technician) entered in the **Technician Code Maintenance**, and the **Units** is set to the **Hours Spent** of the line. When substituted Cost Code doesn't exist, the **Cost Type** will be grayed out and **U/M** will be set to **L** (Labor).

The **Cost Type** is set to **Material**, if it is **Active** for the substitute **Cost Code**.

If the **Post to G/L for Work in Process** option is not selected in the **Job Cost Options**, and there is **G/L Account** specified for the Material **Cost Type** of the substitute **Cost Code**, it will be set for the imported line.

If there is no G/L Account specified for the Material Cost Type of the substitute Cost Code, the Def G/L Acct for Job Posting Entry specified in the Service Management Options will be used.

If the **Post to G/L for Work in Process** option is selected in the **Job Cost Options**, the **Def G/L Acct for Job Posting Entry** will be used.

If the substituted **Job** is **Closed**, Dispatch will not be imported.

# A/R Invoice Data Entry

Select the **Invoice Data Entry** program from the **Accounts Receivable Main** menu.



The added **Bill To Customer No.** field displays the customer number set in the **Customer Maintenance** program. You can select a different Bill To Customer for the current invoice.

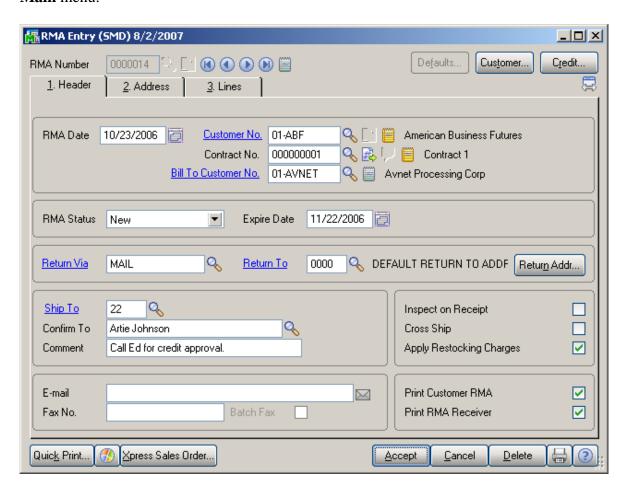
The program displaying Credit information checks the Credit Limit for the Bill To Customer instead of the main (Ship To) Customer.

The A/R Invoices are processed based on the settings in the **Sales Order Options**, similar to S/O Invoices.

# R/A processing with Bill To Customers

## Return Merchandise Authorization Entry

Select the **Return Merchandise Authorization Entry** program from the **Return Merchandise Authorization Main** menu.



The Contract No. field with its Contract Memo has been added to the **Header** tab of **RMA Entry** screen.

The added **Bill To Customer No.** field displays the customer number set in the **Customer Maintenance** program. You can select a different Bill To Customer for the current entry.

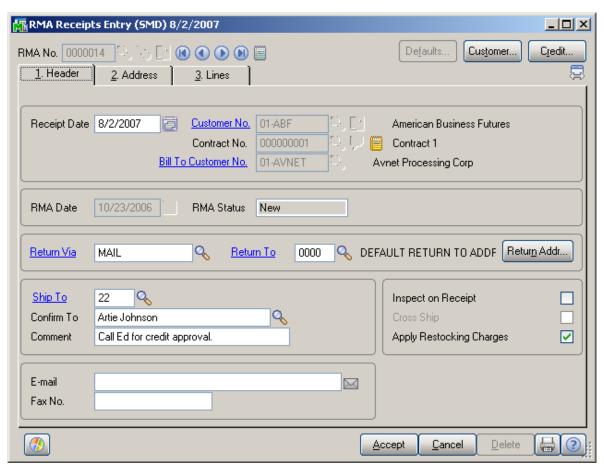
The program displaying Credit information checks the Credit Limit for the Bill To Customer instead of the main (Ship To) Customer. All the documents generated from RMA are generated for the Bill To Customer.

The **Invoices** available for selection in the **Lines** tab are checked to have the same **Bill To Customer** as the **RMA Entry** itself. If they do not match, the program does not select the invoice and displays the following message:



# RMA Receipts Entry

The **Bill To Customer** field has been added to the **RMA Receipts Entry** screen.

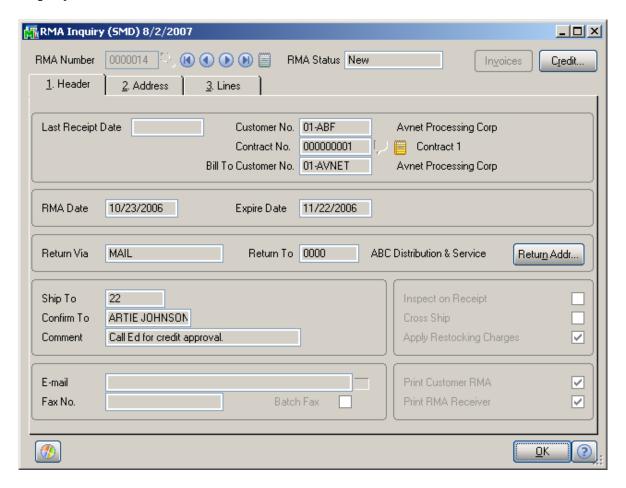


The Contract No. field with its Contract Memo has been added to the **Header** tab of **RMA Receipts Entry** screen.

The **Address** tab displays the Bill To and Ship To addresses.

# RMA Inquiry and Invoice History Inquiry

The **Bill To Customer** field has been added to the **RMA Inquiry** screen.

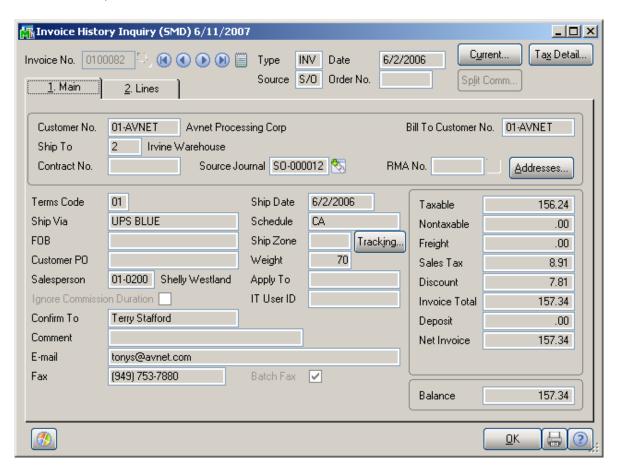


The Contract No. field with its Contract Memo has been added to the **Header** tab of **RMA Inquiry** screen.

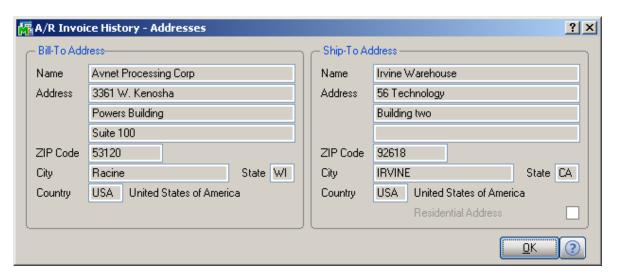
The **Address** tab displays the Bill To and Ship To addresses.

The Credit information is displayed for the Bill To Customer instead of the main (Ship To) Customer.

The **Bill To Customer No.** field has been added to the **Invoice History Inquiry** screen (**Inquiries** menu of the **RMA** module).



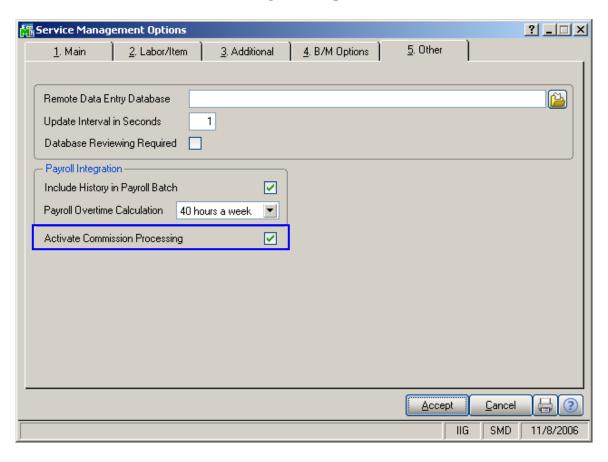
Clicking the **Address** button displays the Bill To and Ship To addresses (**A/R Invoice History – Address** screen).



# **Commission Processing**

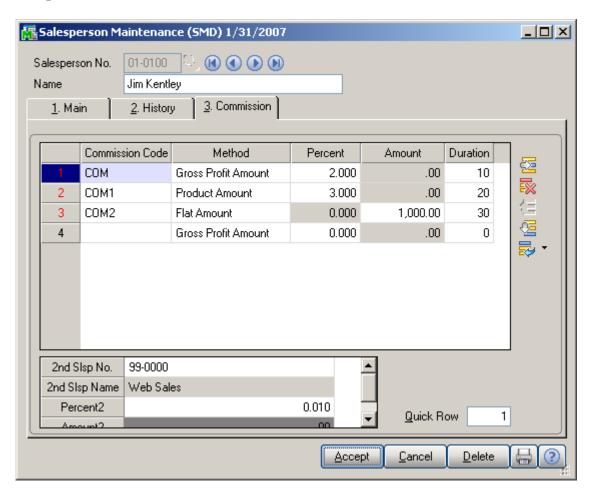
## Commission Processing activation

To use the **Commission Processing** with Service Management, check the **Activate Commission Processing** box on the **Other** tab of **Service Management Options**.



## Salesperson Maintenance

The Commission Tab has been added to the Salesperson Maintenance program under the Accounts Receivable Setup menu.



#### Select the **Salesperson Number**.

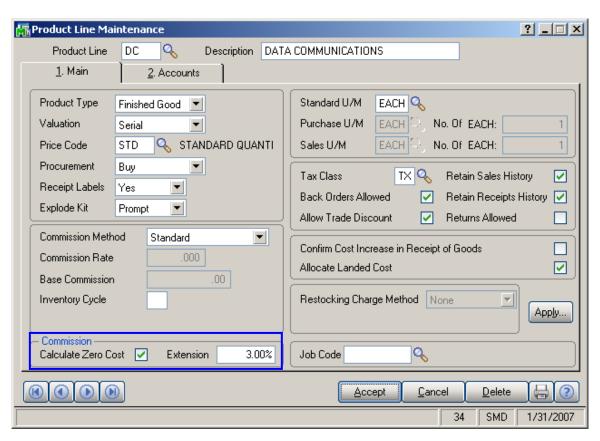
Multiple Commission Codes with different Methods can be specified for the Salespersons located on the main grid, and also for the Salespersons located on the secondary grid. Enter new Commission Code, and select the Method. The available Methods are Gross Profit Amount (a discount by a percentage of the item's Gross Profit), Product Amount (a discount by a percentage of the amount by which the item has been sold) and Flat Amount (a fixed amount, set beforehand to the item).

Enter **Percent** for the selected **Gross Profit Amount** or **Product Amount** Methods, and enter **Amount** for the **Flat Amount** Method.

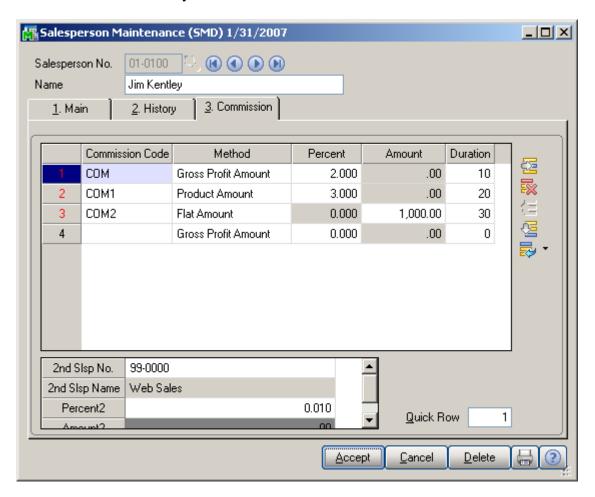
You can also specify **2nd Salesperson Number** and **Percent** in the corresponding fields.

When **Gross Profit Amount** Method is selected and the item cost is set to 0, then no commission amount will be calculated for that item.

If the Calculate Zero Cost check box is selected in the Product Line Maintenance, then while calculating Commission for the items of that Product line with 0 cost, the cost will be taken based on the Extension percent. In other words the cost is calculated by the following method: percent of net specified in the Extension field is subtracted from net.

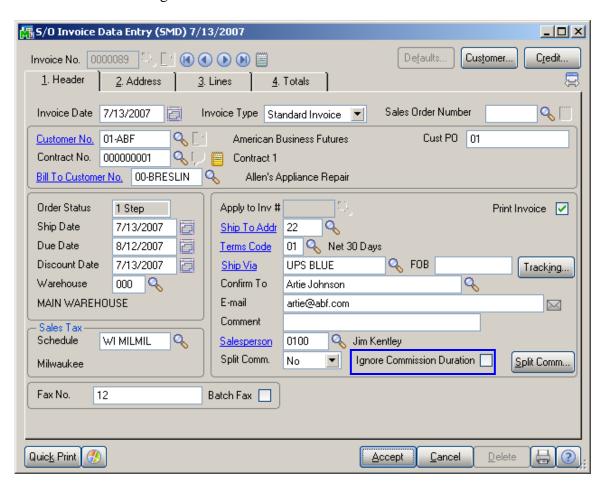


The **Duration** is the time period in months, for which the **Duration** will be valid, if duration is not valid, then the calculation will be done by standard.



The Commission Duration starts calculating from the date specified in the **First Sales Date** field on the **Statistics** tab of the **Customer Maintenance**. But if a contract is specified on the current Invoice which is commissionable, then the Duration will start calculating from the date of that contract (not the one specified in the First Sales Date field).

If the **Ignore Commission Duration** check box is selected on the **Header** tab of the **S/O Invoice Data Entry/Sales Order Entry** screen, the Duration set in the **Salesperson Maintenance** will be ignored.



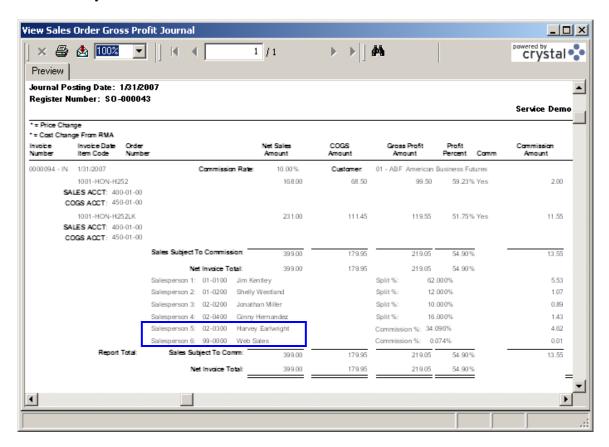
The **Bill To Customer No.** field displays the customer number set in the **Customer Maintenance** program. You can select a different Bill To Customer for the current Invoice.

## First Sales Date

The **First Sales Date** is automatically set to the posting date when the first sale is updated for the customer. The date can be also set manually if needed.



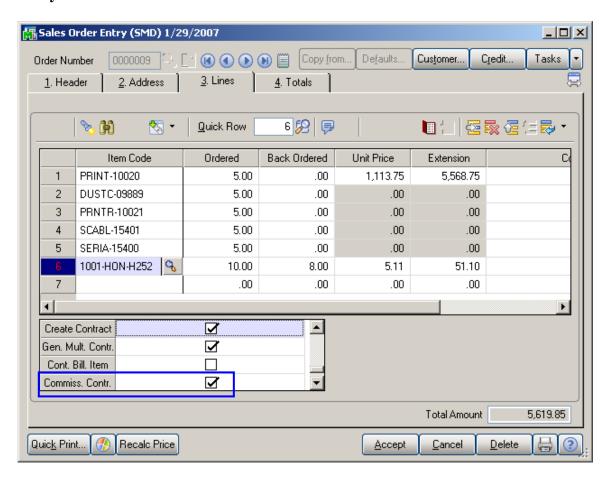
The **Gross Profit Journal** report displays the information of the Salespersons (main, split, override & secondary) calculated by the methods mentioned above.



The lines with Salesperson 5 and Salesperson 6 display information of secondary salespersons.

# Generating Commissionable Contracts

The Commissionable Contract check box has been added to the Lines Tab of the Sales Order Entry and Invoice Data Entry.



The check box is available if the **Create Contract** box is checked.

If you select the **Commissionable Contract** box, the contract created during update will be marked as **Commissionable**.

If contract is specified on the **Options** tab of the **Inventory Maintenance** program, the **Create Contract** check box will be automatically marked.

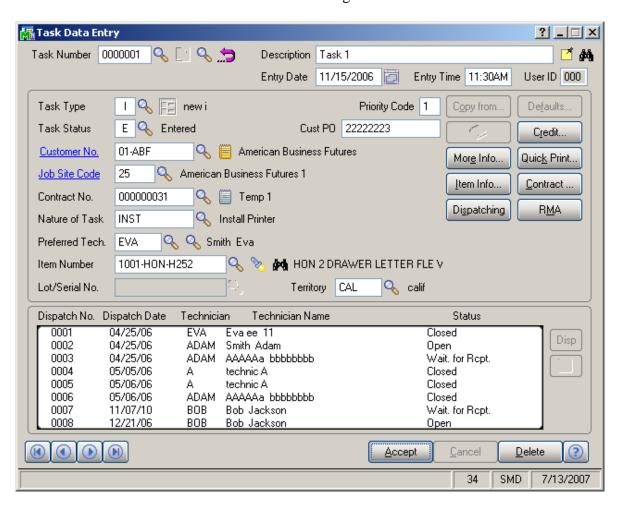
The Commissionable Contract display-only check box has been added to the **Header** tab of the **Contract Entry** screen.

Here is the created Commissionable Contract:



# Invoicing Tasks of Commissionable Contract

If the Task includes commissionable contract and SO is generated from the dispatch of that Task, then the salesperson is set to the generated SO which was specified on the invoice from which the commissionable contract had been generated.



All the sequential sales orders and invoices generated for that Contract will be generated for the same Salesperson with which the invoice has been updated.

# Visual Integrator

It is possible to define and maintain import/export jobs for importing/exporting data of S/M (Service Management) module through the **Visual Integrator.** 

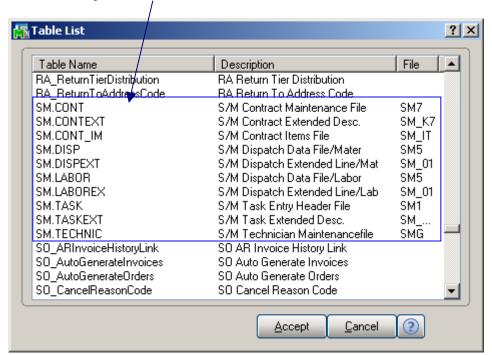
Select the **Import Job Maintenance** from the **Visual Integrator Main** menu.

In the V/I Import Job Selection, enter the Job Name.



Click the Lookup button to open the Table List.

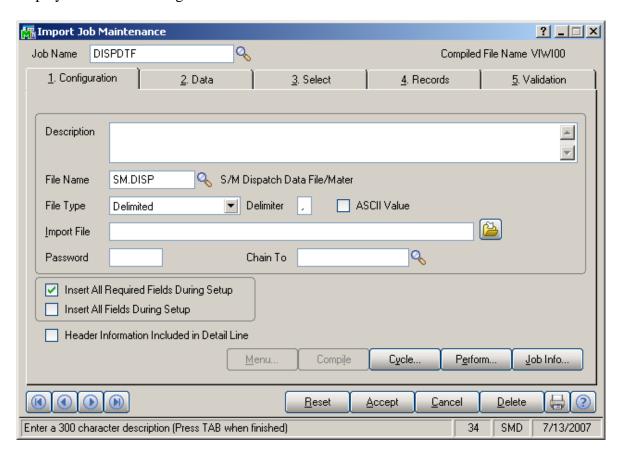
The following SM data files have been added:



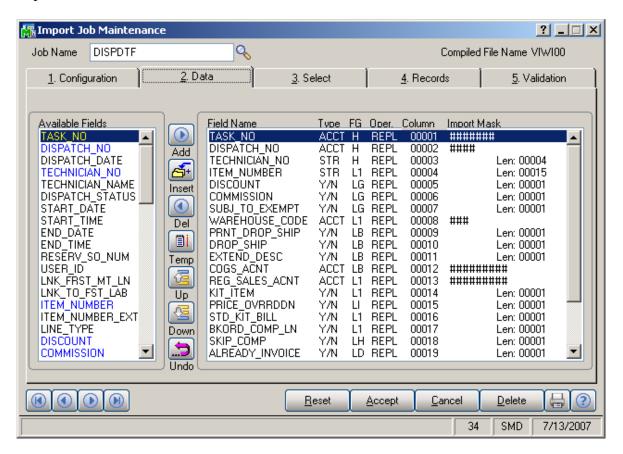
Here is the full description list of these data files:

- S/M Contract Maintenance File
- S/M Contract Extended Desc.
- S/M Contract Items File
- S/M Dispatch Data File/Material
- S/M Dispatch Extended Line/Material
- S/M Dispatch Data File/Labor
- S/M Dispatch Extended Line/Lab
- S/M Task Entry Header File
- S/M Task Extended Description
- S/M Technician Maintenance File

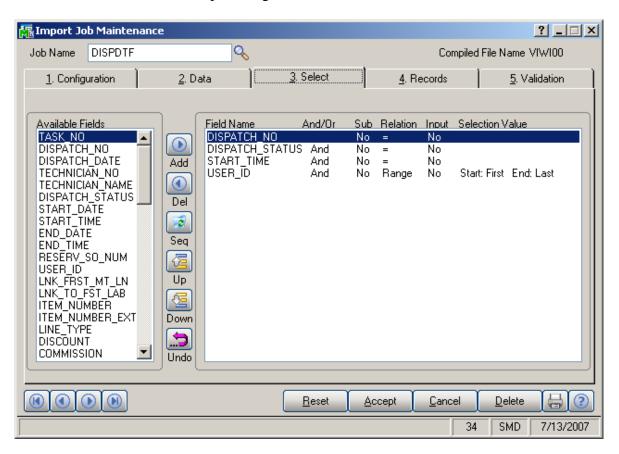
When selecting a Table Name, the **Import Job Maintenance** screen will be displayed. In the **File Name** field selected table name of the data file (in this case, S/M DISP) is displayed. It can be changed to extended data file.



In the **Data** tab, select data fields of the S/M data file to be assigned to the data fields to be imported. You have also to specify the operations that should be performed with the imported data.



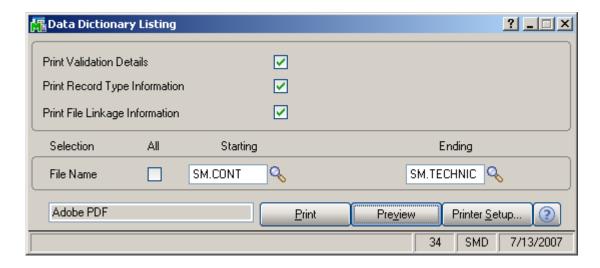
In the **Select** tab, specify selection ranges for data fields to determine which records to import or ignore.



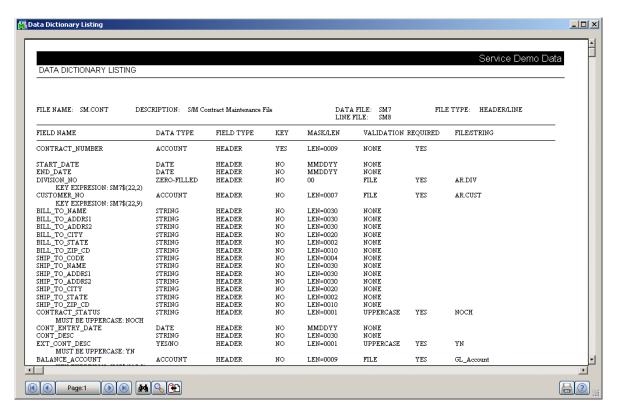
After accepting the job, it will be prepared for use, and then executed with assigned data fields of specified S/M data file.

The jobs can be created from the **Export Job Maintenance** for exporting these S/M data files.

In the **Data Dictionary Listing**, select data files and data items contained within each S/M data file in the Data Dictionary.

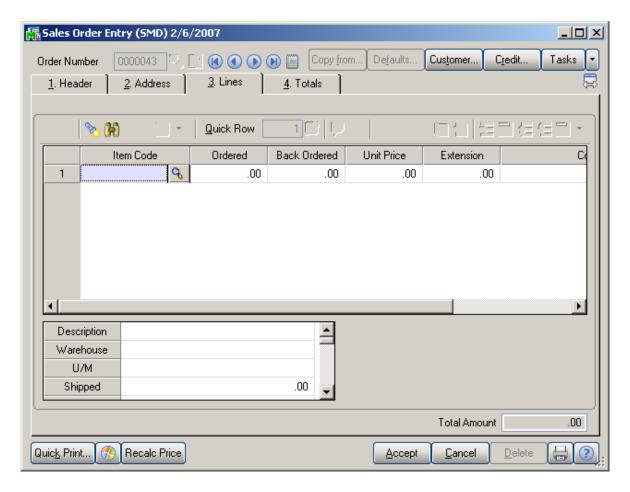


Here is the result of printout:

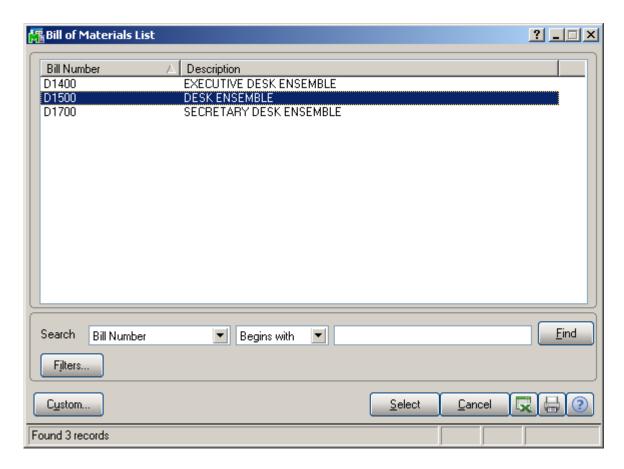


# Sales Order Entry (example from SM Options; Sales Kit Item Number)

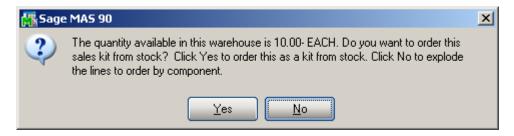
#### **Example:**



Click the **Bill of Materials Search** button to select a kit.

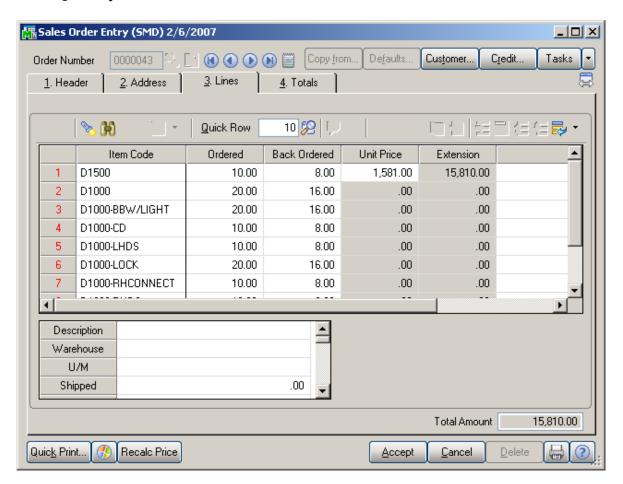


The following message box will be displayed.

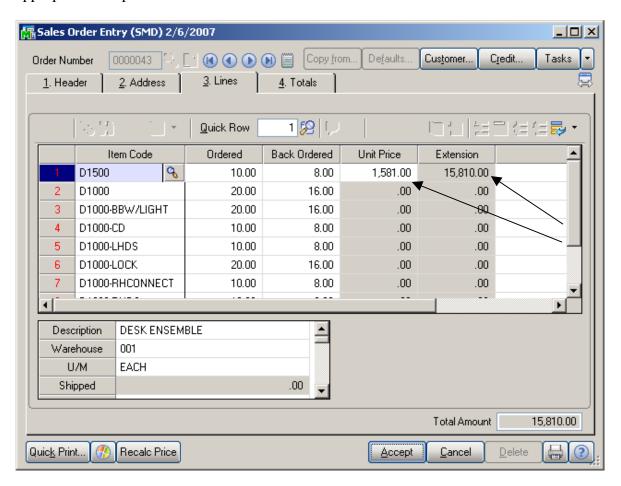


Click No.

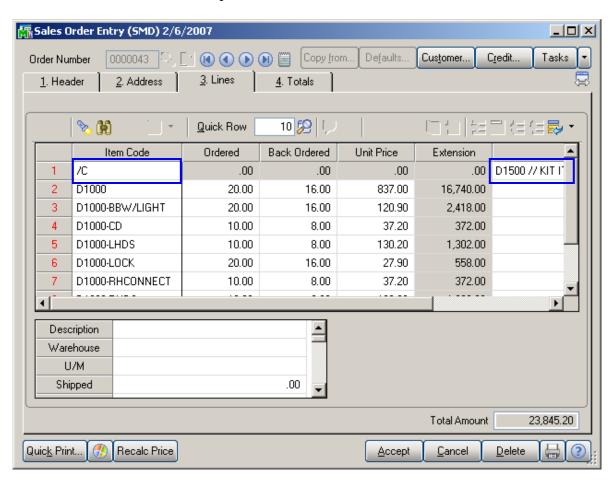
Enter Quantity Ordered and click OK.



When the **Present Sales Kit as a Set of Regular Items** checkbox in **Service Management Options** is unchecked, a Sales Kit Item will be shown as a line item with its appropriate unit price and line extension.



If the **Present Sales Kit as a Set of Regular Items** checkbox in **Service Management Options** is checked, a Sales Kit Item will be replaced with a comment line item, indicating sales kit item number and description.



All the kit components will be shown as regular line items with appropriate price and extension information.

# Additional Enhancements for Service Management

The following Enhancements can work in Service Management.

- IIG Proposal
- Daily Sales Order Bookings

# **Appendix**

## Installing from Zip of Self-extracting archive file

If the Enhancement is delivered as a Zip file, use WinZip or any one of the zip utilities to extract the CD image to your hard disk.

The Enhancement may be received as a self-extracting file. It will be named something like SMP\_CD.EXE. Save that file to your hard disk, and run it (double-click its name). The Zip File Self-Extracting program will ask you where you want the files to be unzipped. We recommend that you point it to the same folder as your MAS 90. Example: Your MAS 90 is installed as F:\ACCT\MAS90. Unzip the files into the F:\ACCT folder. When finished, it should look like F:\ACCT\SMP\_CD.

Find the SETUP.EXE in the extracted CD image folder, and run it. In our example, the path to the file would be F:\ACCT\ SMP\_CD\SETUP.EXE. Follow instructions on the screen.