

# TFG4000™

Professional Edition

## New Users Guide



Version 1.4.5

Copyright © 2006, 2007 The Fredrick Group, Inc. All rights reserved.

Information in this document is provided by The Fredrick Group, Inc. on an "as is" basis, without any other warranties or condition, express or implied, including but not limited to, warranties of merchantable quality, satisfactory quality, merchantability or fitness for a particular purpose, or those arising by law, statute, usage of trade, course of dealing or otherwise. The entire risk as to the results of the information received is assumed by you. We shall have no liability to you or any other person or entity for any indirect, incidental, special, or consequential damages whatsoever, including, but not limited to, loss of revenue or profit, loss or damaged data or other commercial or economic loss, even if we have been advised of the possibility of such claims by a third party. Our maximum aggregate liability to you and that of our dealers and suppliers shall not exceed the amount paid by you for the particular product or copy of the product or service giving rise to the claim. Some states/countries do not allow the exclusion or limitation of liability for consequential or incidental damages, so the above limitations may not apply to you.

TFG4000 is a trademark of The Fredrick Group, Inc.

Microsoft®, Windows®, Windows XP®, Windows 2003 Server®, Windows 2000 Server®, and Windows NT® are trademarks or registered trademarks of Microsoft Corporation.

Java® is a registered trademark of Sun Microsystems.

All other products, fonts, names, and logos are trademarks of their respective company.

This product includes software developed by the Apache Software Foundation (<http://www.apache.org/>).

The Fredrick Group, Inc. (TFG) welcomes your comments. Please address them to:

The Fredrick Group, Inc.  
PO Box 1698  
Cumming, Georgia 30028

By e-mail: Send an e-mail to [tfg4000@fredrickgroup.com](mailto:tfg4000@fredrickgroup.com).

Printed May 2007

# Table of Contents

Using TFG4000 .....	5
What You Need to Know .....	5
You do not have to enter something in every "box" on a screen .....	5
There are many useful buttons .....	5
The color of a field is important .....	6
Some of the dropdowns can be modified .....	6
Help is always just a click away .....	6
We want to hear from you! .....	7
Using Inventory Management .....	8
Suggested steps for getting started.....	8
Inventory Management System Variables .....	8
What You Need to Know About Inventory Management .....	9
Items must be defined before inventory can be entered.....	9
Items are easy to define.....	9
Inventory Locations must be defined before inventory can be entered .....	9
Inventory locations are easy to define .....	9
Inventory is maintained via "transactions" .....	10
You do not have to enter a Bill of Materials if you don't need one.....	10
There are some differences between "Prices" and "Costs" .....	11
The "Stock Item" field can be very important .....	11
Screen Help and the Users Guide are your friends.....	11
We want to hear from you! .....	11
Using Job Order Management .....	12
Suggested steps for getting started.....	12
Job Order Management System Variables .....	12
What You Need to Know About Job Order Management .....	12
What is a job order?.....	12
What is a process?.....	13
You don't need to pre-define anything to add a job order .....	13
Picking is your "Shopping List".....	13
There are many different ways to view potential shortages .....	14
Screen Help and the Users Guide are your friends.....	14
We want to hear from you! .....	14
Using Sales Order Management.....	15
Suggested steps for getting started.....	15
Sales Order Management System Variables.....	15
What You Need to Know About Sales Order Management .....	16
You can use your own customer numbers or let the system generate them .....	16
You can have multiple addresses for a customer .....	16
You can have multiple contacts for an address.....	16
Items must be defined before you can use them on a Sales Order.....	16
Items are easy to define.....	16
Entering a sales order is easy.....	17
You can generate a Packing Slip with one click .....	17
Shipping is simple.....	18
You can generate an Invoice with one click .....	18
Screen Help and the Users Guide are your friends.....	19
We want to hear from you! .....	19
Using Purchasing Management.....	20
Suggested steps for getting started.....	20
Purchasing Management System Variables.....	20

What You Need to Know About Purchasing Management .....	21
You can use your own supplier (vendor) numbers or let the system generate them .....	21
You can have multiple addresses for a supplier .....	21
You can have multiple contacts for an address .....	21
Items must be defined before you can use them on a Purchase Order .....	21
Items are easy to define .....	22
Entering a purchase order is easy .....	22
Receiving is simple .....	22
Screen Help and the Users Guide are your friends .....	23
We want to hear from you! .....	23
Using Material Scheduling .....	24
Suggested steps for getting started .....	24
Material Scheduling System Variables .....	24
What You Need to Know About Material Scheduling .....	24
What is material scheduling? .....	24
What are requirements? .....	25
What are planned orders? .....	25
Screen Help and the Users Guide are your friends .....	25
We want to hear from you! .....	25
Using Preventive Maintenance .....	26
Suggested steps for getting started .....	26
Preventive Maintenance System Variables .....	26
What You Need to Know About Preventive Maintenance .....	27
Some terminology .....	27
Scheduled events trigger job orders .....	28
You don't need to pre-define anything to add a Demand PM job order .....	28
Picking is your "Shopping List" .....	28
Screen Help and the Users Guide are your friends .....	29
We want to hear from you! .....	29
Using Warehouse Management .....	30
Suggested steps for getting started .....	30
Warehouse Management System Variables .....	30
What You Need to Know About Warehouse Management .....	32
Some terminology .....	32
The purpose of Warehouse Management .....	32
Screen Help and the Users Guide are your friends .....	32
We want to hear from you! .....	32
Using Shared Applications .....	33
What You Need to Know About Shared Applications .....	33
What are the Shared applications and what uses them? .....	33
The purpose of Shared Applications .....	34
Screen Help and the Users Guide are your friends .....	34
We want to hear from you! .....	34
Using System Administration .....	35
TFG4000 System Variables .....	35
What You Need to Know About System Administration .....	36
The purpose of System Administration .....	36
The functions within System Administration .....	36
Screen Help and the Users Guide are your friends .....	37
We want to hear from you! .....	37

# Using TFG4000

## What You Need to Know

To use TFG4000 there are you few things you need to know.

### You do not have to enter something in every “box” on a screen

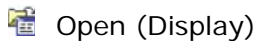
Most of the data in TFG4000 is optional. You do not have to enter something in every field you see on the screen. Many fields have default values and the rest are optional. If you do not enter something that is required, you will receive a message indicating what is missing.

### There are many useful buttons

You will recognize most of the buttons you see in TFG4000, but here are a few special buttons that are very useful:



This button clears data from the screen. It does not update any data; it merely clears the data away to make it easier for you to enter something else. It is particularly useful for resetting summary screens for a new search and it may be required when adding new entries on some screens.



This button retrieves data that has been previously saved for viewing and/or modifying. The **Enter** key executes this button by default.



This button retrieves data that alphabetically precedes the currently displayed data.



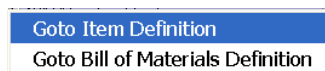
This button retrieves data that alphabetically follows the currently displayed data.



This button is for finding data you have already entered. When you click this button a search box pops up.



This button is for either transferring to another screen or selecting data. When you right-click on this button, it displays a menu of related screens and/or a menu of selection activities. To transfer to another screen, click on the screen you desire and that screen is displayed with the appropriate keys already filled in. To select data, such as a component or inventory location, click the action you want.



This button is located at the lower left corner of each table. It allows you to edit the layout of the table. You can use this button to hide or display columns in the table and to restore the original table layout.



This button appears in the lower right corner of modifiable tables so that you can put more empty rows on the screen for adding data to the table. If you are trying to enter another row in a table and there are not any blank rows to use, click the "Add Rows" button.




### The color of a field is important

The fields on the screens and in screen tables have three different colors that have functional significance.

- |               |   |
|---------------|---|
| <b>Gray</b>   | A gray field is display only, no entry allowed or necessary       |
| <b>White</b>  | A white field is open for entering data                           |
| <b>Yellow</b> | A yellow field indicates where the cursor is currently positioned |

### Some of the dropdowns can be modified

There are many fields in TFG4000 that have lists from which you can choose a pre-defined value. Those lists are called "dropdowns". Some of the dropdowns are used by the system and cannot be changed, but many of them are for your use and you can add, delete, and change those lists as you want. The System Administration area of TFG4000 has a screen called "Dropdown Control". Use this screen to change dropdowns to suit your needs.

1. Click the plus (" + ") next to "System Administration" or double-click  "System Administration" in the "NavTree".
2. Click "Dropdown Control."
3. Locate the dropdown you want to change.
4. If you need to add entries, click the "Add Rows" button  in the lower left corner of the table.
5. There is a box next to each entry where you can click to indicate you want to delete that entry.
6. After you have made the changes you want, click the Save button  located on the toolbar.

### Help is always just a click away

Help is always available in many forms throughout TFG4000 and is accessible from anywhere within TFG4000. There is help for every field on the screen, for the screen itself, and for the entire application.

**Tip of the Day** When you first start TFG4000 you will receive a "Tip of the Day" message to help you learn more about TFG4000.

**Tooltips** Position your cursor over any button, tab, or field and hold it there briefly. A little yellow box will appear with a very brief explanation of that thing. Be sure to look at the tooltips for the buttons in the lower left and lower right corners of screen tables.

**Field Help** Position your cursor in a field and press F1 or right click your mouse and select Help. A window will appear with an explanation of the field.

- Table Help** Right click the heading of any column in a table on the screen and select Help. A window will appear with an explanation of the column.
- Screen Help** Click the Help menu at the top of the screen and select Screen Help. A window will appear with an explanation of the screen and how to use it.
- User Guide** Click the Documentation menu at the top of the screen. Select the manual you want to read. It will be opened in Adobe Reader where you can read more about the application and the individual screens.

There are many other features of TFG4000 that make TFG4000 powerful, but easy to use. Please read the Getting Started Guide, the user guide for the application(s) you are using, and the System Administration Guide for more information.

**We want to hear from you!**

If you have any ideas or suggestions about how to make TFG4000 better including reports you would like to see, please let us know. Many of the features you see were implemented based on comments from people like you. You can call 770-844-8516 and leave a message or send email to [tfg4000@fredrickgroup.com](mailto:tfg4000@fredrickgroup.com)

# Using Inventory Management

## Suggested steps for getting started

The following are some steps you can follow to get started:

- (1) Understand and set the Inventory Management System Variables – system variables control how things are done in the system. If you do not set the system variables the way you want, the system may not work the way you want.
- (2) Define your items – items must be defined before they can be used. Under Shared Applications use screen **Item Definition**.
- (3) Define your inventory locations – locations must be defined before they can be used. Under Shared Applications use screen **Location** (you may need to define warehouses with the **Warehouse** screen and zones with the **Zone** screen first if you want to use warehouses and zones)
- (4) Enter inventory – you'll need initial inventory balances. You can use cycle counting or adjustments to enter the initial balances. Under Inventory Management use screen **Item Inventory**
- (5) Keep going – now you are ready! Keep going and get your inventory under control!

## Inventory Management System Variables

The first thing you must do before using TFG4000 Inventory Management is understand the system variables used by the application. They are explained in the "Initial Setup" section of the "Inventory Management Users Guide" and the "Initial System Setup" section in the "Getting Started Guide".

TFG4000 Inventory Management is installed with certain features that can be changed. The features are controlled with system variables. There are several system variables you need to understand before you start using Inventory Management. See the System Variables screen in the System Administration User Guide for more information about changing the settings for system variables. The System Administration User Guide is available from the Windows "Start" menu or from the "Documentation" menu within TFG4000.

**Allow\_Negative\_Inventory** (default is "No") -- With this variable set to "No", on hand inventory balance cannot be negative. An inventory transaction that would cause the on hand balance to go negative will be rejected as error. With this variable set to "Yes", on hand inventory balance can be negative. No inventory transactions will be rejected.

**Inventory\_Cost** (default is "Current Cost") -- With this variable set to "Current Cost", inventory cost is calculated using the total inventory cost entered for an item on the Cost and Price screen. When the inventory cost on the Cost and Price screen is changed the total inventory cost is recalculated using the new value. With this variable set to "Average Cost", inventory cost is calculated using the average cost of the item.

**Order\_Point\_Email** (default is blank) – Order Point processing sends email notification when the order point for an item has been reached. Normally the message is sent to the email address on the Order Point Item screen for the item, but if no email address was defined, the system sends the message to the default email address defined with this variable. If you do not want messages sent to a default email address, leave this variable blank.

**Order\_Point\_IM** (default is blank) – Order Point processing sends an instant message when the order point for an item has been reached. Normally the message is sent to the IM address on the Order Point Item screen for the item, but if no IM address was defined, the system sends the message to the default IM address defined with this system variable. If you do not want a notification sent to a default IM address, leave this variable blank.

**User\_Image\_Directory** (default is "UserImages") – This variable indicates where pictures of items are stored. The default directory is located under the "Server" directory where you installed TFG4000. If you want to store images elsewhere you must change this variable and include the full directory path. Please make sure the path is accessible to anyone who needs to view item images.

## What You Need to Know About Inventory Management



To use TFG4000 Inventory Management there are you few things you need to know.

### Items must be defined before inventory can be entered

Before you can start tracking inventory you **must** have an item defined. You can define your items using the Item Definition screen.

### Items are easy to define

To define an item, do the following:

1. Click the plus ("+") next to "Shared Applications" or double-click  "Shared Applications" in the "NavTree".
2. Click "Item Definition". The Item Definition screen is displayed.
3. Enter an item number in the "Item/Part" field.
4. Enter or select data in any of the other fields – they are all optional and you do not have to enter anything in any of them if you do not want to. Some of them will default.
5. Click the Save button  located on the toolbar.



**Note:** The "Type" field and some of the other fields on the item definition screen are controlled by a "dropdown" list that contains various values you can use. Dropdowns are delivered with examples that you can modify to suit your business better. See the "Using TFG4000" section of the guide for more information about dropdowns.

### Inventory Locations must be defined before inventory can be entered

Before you can start tracking inventory you **must** have an inventory location defined. You can define your locations using the Location screen under Shared applications.

### Inventory locations are easy to define

To set up your Inventory Locations, do the following:




1. Click the plus ("+") next to "Shared Applications" or double-click  "Shared Applications" in the "NavTree".
2. Click "Location".
3. Enter the location name in the "Location" field.
4. Enter or select other data as desired.
5. Once finished, click the Save button  located on the toolbar.


**Note:** If you want to use warehouses and zones you will have to define them first with the Warehouse and Zone screens. They are easy too.

## Inventory is maintained via “transactions”

With TFG4000 you use transactions to update inventory instead of updating the on hand balance directly. It is analogous to the way you do your banking. You take a deposit slip to the bank. The deposit slip represents a “transaction” and tells the bank the account where you want to deposit the money and how much money you are depositing. The bank processes the transaction and tells you what your current balance is.

In TFG4000, you execute an inventory transaction as follows:

1. Click the plus (“+”) next to “Inventory” or double-click  “Inventory Management” in the “NavTree”.
2. Click “Inventory Control”. The Item Inventory screen is displayed.
3. Enter the item number you need and press Enter.
4. Select a transaction type in the “Transaction Type” column by clicking the little down arrow in that column then move your cursor over the transaction type you want. For the initial balance you might choose “Adjust”. For more information about transaction types, right click the “Transaction Type” column heading and select “Help”.
5. In the next column, “Transaction Quantity”, enter the quantity you need for this transaction. For the initial balance you would enter what you currently have on hand for the item. Did you see the On Hand Balance change? That column shows you what the result of your transaction will be, but nothing has been updated yet so you can change the transaction type, the quantity, etc. without affecting inventory at this point.
6. Click the little magnifier button  in the “Location” column, then click “Choose Location” and use the search pop-up to find and select the location you want.
7. Once you have a location, click in the “Transaction Description” column and enter a note about the transaction so you will know more about it later when you view the transaction history.
8. Click the Save button  located on the toolbar to execute the transaction.

Now that you have an inventory balance, you can perform more transactions for that item and location. You won’t have to enter the location again; all you have to do is enter your transaction in the row that has the location you want. For example, you have an on hand balance of 100 in location Stock1 and an on hand balance of 50 in location Stock2. If you want to use 25 from Stock1, just select the transaction type “Issue” on the Stock1 row and enter 25 in the “Transaction Quantity” on the Stock1 row. Enter a “Transaction Description” if you want, then click the Save button  located on the toolbar.

## You do not have to enter a Bill of Materials if you don’t need one

Bill of Materials is used to define the structure of an item. An item can be made up of other items, and those items can be made of other items, etc. If your items do not have structures, you do not need to use the Bill of Materials feature.

**Note:** For an item with components, i.e. an item that has a bill of materials defined for it, inventory transactions **do not** affect the components. For example, if an item called ITEM1 has a bill of materials with five other items as components and a Ship

transaction is performed for ITEM1, inventory for ITEM1 will be affected but none of the inventory for any of its components will be affected.

To process inventory for components you must enter inventory transactions for each component or use the TFG4000 Job Order Management application. See "Updating Inventory for Components on a Bill of Materials" in the Item Inventory section of the Inventory Management Users Guide for more information.

### **There are some differences between "Prices" and "Costs"**

A price is the amount you charge your customer when you sell something. The most important price on the Cost and Price screen is the "Net Price". The net price is the amount that appears on customer orders.

A cost is the amount you incur when you purchase or build something. There are three kinds of cost:

<b>Material Cost</b>	The amount incurred to purchase the item
<b>Other Cost</b>	The amount incurred to provide a service or fixed costs other than material cost like overhead or processing costs
<b>Inventory Cost</b>	The value of this item in inventory – <b>very important</b> – this is the cost you see on all of the inventory screens and reports.

### **The "Stock Item" field can be very important**

The "Stock Item" field tells the system whether or not you want to track inventory for an item. If your system is configured to prevent negative inventory (see the Allow\_Negative\_Inventory variable at the beginning of this section) this field will have more importance.

An item defined as "Stock Item" = Yes cannot have negative inventory. You must have inventory available to use the item, and if something you are doing would cause the inventory for this item to become negative, you will receive an error message telling you so.

If an item is defined as "Stock Item" = No, you do not have to have any inventory at all to use the item, but if you do have inventory, the system will allow that inventory to become negative.

### **Screen Help and the Users Guide are your friends**

Every screen has help available that describes the screen and how to use it. Click the Help menu at the top of the screen and select Screen Help.

The Inventory Management Users Guide has a lot of useful information to help you use TFG4000 Inventory Management. It has step by step instructions for all of the functions available on every screen. It is always available from the "Documentation" menu at the top of the screen.

### **We want to hear from you!**

If you have any ideas or suggestions about how to make TFG4000 better including reports you would like to see, please let us know. Many of the features you see were implemented based on comments from people like you. You can call 770-844-8516 and leave a message or send email to [tf4000@fredrickgroup.com](mailto:tf4000@fredrickgroup.com)

# Using Job Order Management

## Suggested steps for getting started

The following are some steps you can follow to get started:

- (1) Understand and set the Job Order Management System Variables – the system variables control how things are done in the system. If you do not set the system variables the way you want, the system may not work the way you want.
- (2) Define your processes – start documenting the steps required in your processes
- (3) Enter job orders – enter your current orders so you can start managing them.

## Job Order Management System Variables

The first thing you must do before using TFG4000 Job Order Management is understand the system variables used by the application.

They are explained in the “Initial Setup” section of the “Job Order Management Users Guide” and the “Initial System Setup” section in the “Getting Started Guide”.

TFG4000 Job Order Management is installed with certain features that can be changed. The features are controlled with system variables. There are three system variables you need to understand before you start using Job Order Management. See the System Variables screen in the System Administration User Guide included on the TFG4000 CD, which is available from the Windows “Start” menu or from the “Documentation” menu within TFG4000. The documentation is also available online.

**Job\_Order\_Full\_BOM** (default is “Yes”) – With this variable set to “Yes”, job orders will be built using a summarized bill of materials, i.e. all components at every level of the bill will be used on the job order bill of material. With this variable set to “No”, only the components on the first level of the bill will be used in the job order bill of materials.

**Job\_Order\_Printer** (installation default is “HP Laserjet Printer”) – This variable indicates the default printer to be used for job order printing.

**Form\_Logo** (installation default is **Cubelcon.gif**) – This variable contains the name of the logo file to use on special forms such as Job Order Forms, Packing Slips, and Invoices. The recommended logo size is 50x50 pixels. The logo can be smaller or larger and the system will size it to fit. If you would like your company logo to appear on forms, place your logo in .gif format in the \\Server\Images directory and set this variable to the name of the logo.

**Report\_Logo** (installation default is **Cubelcon.gif**) – This variable contains the name of the logo file to use on reports. The recommended logo size is 50x50 pixels. The logo can be smaller or larger and the system will size it to fit. If you would like your company logo to appear on reports, place your logo in .gif format in the \\Server\Images directory and set this variable to the name of the logo.

## What You Need to Know About Job Order Management

To use TFG4000 Job Order Management there are you few things you need to know.

### What is a job order?



A job order identifies the need to perform some work. It can be used for both production and services. A job order can also be described as a work order. Within the job order you can identify the materials needed and the process needed to perform the task.

## What is a process?

A process is a set of discrete steps necessary to perform an action. With the Process Maintenance screen, processes can be defined to support both production and service job orders. They can be as detailed as necessary to convey the information needed. The information screens allow you to enter narrative text for both the overall process and the individual operational steps for the process. In addition, the information screens allow you to attach external references in various forms. For example, it can be in the form of text that explains where the external information can be found such as a book and the page in the book; it can be an electronic document such as a spreadsheet or diagram; it can be a URL to a website, etc.

## You don't need to pre-define anything to add a job order

Here's how easy it is to add a job order:

1. Click the plus ("+") next to "Process/Job Order" or double-click  "Process/Job Order" in the "NavTree".
2. Click "Job Order". The Job Order screen is displayed.
3. Click the Save button  located on the toolbar. A job order number is generated automatically and the order is inserted!

Of course, you may want more than that, so the job order has a place for you to enter the following:

- (1) A manual job order number
- (2) The item number of the product or service the order is for
- (3) A quantity to be completed
- (4) Various dates
- (5) The bill of materials (parts list) needed to complete the order
- (6) The process that must be followed to complete the order

As you can see, you don't have to have any of those things to add an order, they are there to use as you find necessary.

## Picking is your "Shopping List"

The picking function of Job Order Management is like a shopping list. It tells you what you need and how many of them you need, and if you have TFG4000 Inventory Management installed, it even tells you where to find them!

You can print the pick list and use it to locate and retrieve ("pick") the items you need. There is a place to indicate how many you picked from a particular inventory location as you go, or you can use the "Pick All" function to update all of them.

If you are using TFG4000 Inventory Management and you notice any negative inventory, verify you have your system configured to prevent negative inventory (see the Inventory Management section of this guide), and see how the item was defined. There is a field called "Stock Item" on the Item Definition screen. If an item is defined as "Stock Item" = No, it means you do not want to track inventory for that item and the system will allow the inventory for that item to go negative.

## **There are many different ways to view potential shortages**

During the course of processing your jobs, you may encounter potential inventory shortages. There are several ways to view potential shortages:

### **By Job Order**

Use the "Shortage" screen to view potential inventory shortages for parts needed for a particular job order.

### **By Job Order with Pending Purchase Orders**

From the "Shortage" screen, select the report called "Job Order Shortage with Purchase Order Report". It will display job orders based on report selection criteria with item requirements, available inventory, and pending purchase orders.

### **By Item**

Use the "Item Shortage" screen to view potential inventory shortages for a particular item based on the current job order demand.

### **For Selected Items**

From the "Item Shortage" screen, select the report called "Job Order Item Shortage Report". You can choose items to display with report selection criteria.

### **For All Items**

From the "Item Shortage" screen, select the report called "Job Order Item Shortage Summary Report". It will list all items that may have a potential inventory shortage based on the current job order demand.

### **By Item with Pending Purchase Orders**

From the "Item Shortage" screen, select the report called "Job Order Item Shortage with Purchase Order Report". It will display items based on report selection criteria with pending job orders, available inventory, and pending purchase orders.

## **Screen Help and the Users Guide are your friends**

Every screen has help available that describes the screen and how to use it. Click the Help menu at the top of the screen and select Screen Help.

The Job Order Management Users Guide has a lot of useful information to help you use TFG4000 Job Order Management. It has step by step instructions for all of the functions available on every screen. It is always available from the "Documentation" menu at the top of the screen.

## **We want to hear from you!**

If you have any ideas or suggestions about how to make TFG4000 better including reports you would like to see, please let us know. Many of the features you see were implemented based on comments from people like you. You can call 770-844-8516 and leave a message or send email to [tf4000@fredrickgroup.com](mailto:tf4000@fredrickgroup.com)

# Using Sales Order Management

## Suggested steps for getting started

The following are some steps you can follow to get started:

- (1) Understand and set the Sales Order Management System Variables – the system variables control how things are done in the system. If you do not set the system variables the way you want, the system may not work the way you want.
- (2) Enter customer information – start entering information about your customers. You don't have to enter all of them all at once, just enter the active customers you have orders for. Under Shared Applications use screen **Customer**
- (3) Define the items you want to sell. Under Shared Applications use screen **Item Definition**
- (4) Enter sales orders – enter your current orders so you can start managing them. Under Sales Orders use screen **Order**

## Sales Order Management System Variables

The first thing you must do before using TFG4000 Sales Order Management is understand the system variables used by the application.



They are explained in the "Initial Setup" section of the "Sales Order Management Users Guide" and the "Initial System Setup" section in the "Getting Started Guide".

TFG4000 Sales Order Management is installed with certain features that can be changed. The features are controlled with system variables. There are two system variables you need to understand before you start using Sales Order Management. See the System Variables screen in the System Administration User Guide included on the TFG4000 CD, which is available from the Windows "Start" menu or from the "Documentation" menu within TFG4000. The documentation is also available online.


**My\_Customer\_Number** (installation default is **1**) – This variable indicates which customer number in the customer database is your own customer number. The system uses your customer number for addresses on documents.

**Report\_Logo** (installation default is **Cubelcon.gif**) – This variable contains the name of the logo file to use on special forms such as Order Forms, Packing Slips, and Invoices. The recommended logo size is 50x50 pixels. The logo can be smaller or larger and the system will size it to fit. If you would like your company logo to appear on forms, place your logo in .gif format in the \\Server\Images directory and set this variable to the name of the logo.

Do the following to define your company:

1. Click the plus (" + ") next to "Sales Order" or double-click  "Sales Order" in the "NavTree".
2. Click "Customer". The Customer screen is displayed.
3. Enter the customer number you want to use or leave this field blank for a system generated customer number. The customer number can contain numbers and letters and it must be unique.
4. Enter data in any of the other fields you desire, these fields are optional.
5. When done, click the Save button  located on the toolbar.

Make note of your customer number, then do the following to set the system variable:

1. Click the plus sign (+) next to "System Administration".
2. Click "System Variables".
3. Change the value of the "My\_Customer\_Number" variable to your customer number.
4. Once finished, click the Save button  located on the toolbar.

**Note:** The address next to the logo on order forms, packing slips, and invoices is the first address of type "Customer" under the customer number entered in system variable **My\_Customer\_Number**. Make sure you define your company, add your address, and set the system variable so your address appears on these forms.

## What You Need to Know About Sales Order Management

To use TFG4000 Sales Order Management there are a few things you need to know.

### You can use your own customer numbers or let the system generate them

The first thing you may want to do is define customers. When you define a customer, you can enter the customer number you want or leave the customer number blank and the system will generate one for you.

### You can have multiple addresses for a customer

You can have as many addresses as you want for a customer. There is a place for you to indicate what kind of address each address is:

<b>Customer</b>	Used for customer correspondence
<b>Acknowledge</b>	Where to send order acknowledgments
<b>Shipping</b>	Where to ship items
<b>Invoice</b>	Where to send invoices

An address can be any combination of these types.

### You can have multiple contacts for an address


Sometimes there is more than one person at an address that you need to contact. TFG4000 allows you to store as many contacts as you need for each address you have.


### Items must be defined before you can use them on a Sales Order

Before you can use an item on a sales order you **must** define it. You can define your items using the Item Definition screen.

### Items are easy to define

To define an item, do the following:




1. Click the plus ("+") next to "Shared Applications" or double-click  "Shared Applications" in the "NavTree".
2. Click "Item Definition". The Item Definition screen is displayed.
3. Enter an item number in the "Item/Part" field.

4. Enter or select data in any of the other fields – they are all optional and you do not have to enter anything in any of them if you do not want to. Some of them will default.
5. Click the Save button  located on the toolbar.

**Note:** The “Type” field and some of the other fields on the item definition screen are controlled by a “dropdown” list that contains various values you can use. Dropdowns are delivered with examples that you can modify to suit your business better. See the “Using TFG4000” section of the guide for more information about dropdowns.

### Entering a sales order is easy

Here’s how easy it is to add a sales order:

1. Click the plus (“+”) next to “Sales Order” or double-click  “Sales Order” in the “NavTree”.
2. Click “Order”. The Customer Order screen is displayed.
3. Enter the customer you want in the “Customer” field
4. Click the “Add Rows” button  in the lower left corner of the table.
5. Enter the items, quantities, and prices for what your customer has ordered.
6. Click the Save button  located on the toolbar. A customer order number is generated automatically and the order is inserted!


Since you have already defined customers and items, you can select them when you enter your order instead of typing them in. Plus, you can use the address screen to select the addresses you want to use on this order.

Also, if you want to use your own customer order number, simply enter your order number in the “Customer Order” field when you are adding the order.


**Note:** The “Order Type” field and some of the other fields on the customer order screen are controlled by a “dropdown” list that contains various values you can use. Dropdowns are delivered with examples that you can modify to suit your business better. See the “Using TFG4000” section of the guide for more information about dropdowns.


### You can generate a Packing Slip with one click

When you are ready to ship, you can generate a packing slip. Just click the “Packing Slip” button on the Order screen. The system will generate a packing slip based on the quantity that has not been packed yet.

Another way to generate a packing slip is to use the Packing Screen. Make sure your order number is in the “Customer Order” field and click the build button  located on the toolbar. Use this method if you want to assign your own packing slip number.

To find all of the packing slips for an order, do the following:

1. Click the plus (“+”) next to “Sales Order” or double-click  “Sales Order” in the “NavTree”.


2. Click "Packing". The Packing Slip screen is displayed.
3. Click the second search button  next to the "Customer Order" field.
4. Enter the order number in the search field.
5. Press Enter or click the "Search" button.
6. All of the packing slips for the order are displayed.
7. Double click the packing slip you want so it will be displayed on the main screen. You can adjust the packing quantities to match the quantities you want to ship.

### **Shipping is simple**



There is a shipping screen where you report shipments. All you have to do is select the inventory location where you want to ship from and enter the quantity you are shipping. When you are done click the Save button  located on the toolbar. The order is updated and inventory is adjusted.

### **You can generate an Invoice with one click**

After you have reported shipments for an order, you can generate an invoice. Just click the "Invoice" button on the Order screen and the system will generate an invoice based on the line items that can be invoiced at that time.

Another way to generate an invoice is to use the Invoice Screen. Make sure your order number is in the "Customer Order" field and click the build button  located on the toolbar. Use this method if you want to assign your own invoice number.

To find all of the invoices for an order, do the following:

1. Click the plus ("+") next to "Sales Order" or double-click  "Sales Order" in the "NavTree".
2. Click "Invoicing". The Invoice screen is displayed.
3. Click the second search button  next to the "Customer Order" field.
4. Enter the order number in the search field.
5. Press Enter or click the "Search" button.
6. All of the invoices for the order are displayed.
7. Double click the invoice you want so it will be displayed on the main screen. You can adjust the invoice quantities to match the quantities you want to invoice at this time.

## **Screen Help and the Users Guide are your friends**

Every screen has help available that describes the screen and how to use it. Click the Help menu at the top of the screen and select Screen Help.

The Sales Order Management Users Guide has a lot of useful information to help you use TFG4000 Sales Order Management. It has step by step instructions for all of the functions available on every screen. It is always available from the "Documentation" menu at the top of the screen.

## **We want to hear from you!**

If you have any ideas or suggestions about how to make TFG4000 better including reports you would like to see, please let us know. Many of the features you see were implemented based on comments from people like you. You can call 770-844-8516 and leave a message or send email to [tfg4000@fredrickgroup.com](mailto:tfg4000@fredrickgroup.com)

# Using Purchasing Management

## Suggested steps for getting started

The following are some steps you can follow to get started:

- (1) Understand and set the Purchasing Management System Variables – the system variables control how things are done in the system. If you do not set the system variables the way you want, the system may not work the way you want.
- (2) Enter supplier information – start entering information about your supplier (vendors). You don't have to enter all of them all at once, just enter the active suppliers you have orders for. Under Shared Applications use screen **Supplier**
- (3) Define the items you want to purchase. Under Shared Applications use screen **Item Definition**
- (4) Enter purchase orders – enter your current orders so you can start managing them. Under Purchase Management select Purchasing, the use screen **Order**

The first thing you must do before using TFG4000 Sales Order Management is understand the system variables used by the application.

## Purchasing Management System Variables

They are explained in the "Initial Setup" section of the "Purchasing Management Users Guide" and the "Initial System Setup" section in the "Getting Started Guide".

TFG4000 Purchasing Management is installed with certain features that can be changed. The features are controlled with system variables. There are three system variables you need to understand before you start using Purchasing Management. See the System Variables screen in the System Administration User Guide included on the TFG4000 CD, which is available from the Windows "Start" menu or from the "Documentation" menu within TFG4000. The documentation is also available online.

**Allow\_PO\_Over\_Receipt** (default is "No") – With this variable set to "No", purchase order receiving will not allow you to receive a quantity greater than the quantity on the purchase order line. With this variable set to "Yes", purchase receiving will allow you to receive a quantity that greater than the quantity on the purchase order line.

**My\_Supplier\_Number** (installation default is 1) – This variable indicates which supplier number in the supplier database is your own supplier number. The system uses your supplier number for addresses on documents.


**Form\_Logo** (installation default is **Cubelcon.gif**) – This variable contains the name of the logo file to use on special forms such as Purchase Order Forms, Quotes, and Requisitions. The recommended logo size is 50x50 pixels. The logo can be smaller or larger and the system will size it to fit. If you would like your company logo to appear on forms, place your logo in .gif format in the \\Server\Images directory and set this variable to the name of the logo.

**Report\_Logo** (installation default is **Cubelcon.gif**) – This variable contains the name of the logo file to use on reports. The recommended logo size is 50x50 pixels. The logo can be smaller or larger and the system will size it to fit. If you would like your company logo to appear on reports, place your logo in .gif format in the \\Server\Images directory and set this variable to the name of the logo.


Do the following to define your company as a supplier:

1. Click the plus (" + ") next to "Purchase Management" or double-click  "Purchase

Management" in the "NavTree".

2. Click "Supplier". The Supplier screen is then displayed.
3. Enter the supplier number you want to use or leave this field blank for a system generated supplier number. The supplier number can contain numbers and letters and it must be unique.
4. Enter data in any of the other fields you desire, these fields are optional.
5. When done, click the Save button  located on the toolbar.

Make note of your supplier number, then do the following to set the system variable:

1. Click the plus sign (+) next to "System Administration".
2. Click "System Variables".
3. Change the value of the "My\_Supplier\_Number" variable to your supplier number.
4. Once finished, click the Save button  located on the toolbar.

**Note:** The address next to the logo on purchase order forms, quotes, and requisitions is the first address of type "Supplier" under the supplier number entered in system variable **My\_Supplier\_Number**. Make sure you define your company, add your address, and set the system variable so your address appears on these forms.

## What You Need to Know About Purchasing Management

To use TFG4000 Purchasing Management there are you few things you need to know.

### You can use your own supplier (vendor) numbers or let the system generate them

The first thing you may want to do is define suppliers (vendors). When you define a supplier, you can enter the supplier number you want or leave the supplier number blank and the system will generate one for you.

### You can have multiple addresses for a supplier

You can have as many addresses as you want for a supplier. There is a place for you to indicate what kind of address each address is:

<b>Supplier</b>	Used for correspondence
<b>Payment</b>	Where to send payments
<b>Return</b>	Where to ship items you are returning

An address can be any combination of these types.

### You can have multiple contacts for an address

Sometimes there is more than one person at an address that you need to contact. TFG4000 allows you to store as many contacts as you need for each address you have.



### Items must be defined before you can use them on a Purchase Order

Before you can use an item on a purchase order you **must** define it. You can define your

items using the Item Definition screen.

### Items are easy to define




To define an item, do the following:

1. Click the plus (“+”) next to “Shared Applications” or double-click  “Shared Applications” in the “NavTree”.
2. Click “Item Definition”. The Item Definition screen is displayed.
3. Enter an item number in the “Item/Part” field.
4. Enter or select data in any of the other fields – they are all optional and you do not have to enter anything in any of them if you do not want to. Some of them will default.
5. Click the Save button  located on the toolbar.

**Note:** The “Type” field and some of the other fields on the item definition screen are controlled by a “dropdown” list that contains various values you can use. Dropdowns are delivered with examples that you can modify to suit your business better. See the “Using TFG4000” section of the guide for more information about dropdowns.

### Entering a purchase order is easy


Here’s how easy it is to add a purchase order:

1. Click the plus (“+”) next to “Purchase Management” or double-click  “Purchase Management” in the “NavTree”.
2. Click “Purchase Order”. The Purchase Order screen is displayed.
3. Enter the Supplier you need for this order.
4. Click the “Add Rows” button  in the lower left corner of the table.
5. Enter the items, quantities, and prices for what you are ordering.
6. Click the Save button  located on the toolbar. A purchase order number is generated automatically and the order is inserted!

Since you have already defined suppliers and items, you can select them when you enter your order instead of typing them in. Plus, you can use the address screen to select the addresses you want to use on this order.

Also, if you want to use your own purchase order number, simply enter your order number in the “Purchase Order” field when you are adding the order.

### Receiving is simple

There is a receiving screen where you report deliveries. If you are not using TFG4000 Inventory Management all you have to do is enter the quantity you are receiving for each line item. If you are using TFG4000 Inventory Management all you have to do is select the inventory location where you want to store the delivery and enter the quantity you are receiving. When you are done click the Save button  located on the toolbar. The order is updated and, if applicable, inventory is adjusted.

### **Screen Help and the Users Guide are your friends**

Every screen has help available that describes the screen and how to use it. Click the Help menu at the top of the screen and select Screen Help.

The Sales Order Management Users Guide has a lot of useful information to help you use TFG4000 Sales Order Management. It has step by step instructions for all of the functions available on every screen. It is always available from the "Documentation" menu at the top of the screen.

### **We want to hear from you!**

If you have any ideas or suggestions about how to make TFG4000 better including reports you would like to see, please let us know. Many of the features you see were implemented based on comments from people like you. You can call 770-844-8516 and leave a message or send email to [tfg4000@fredrickgroup.com](mailto:tfg4000@fredrickgroup.com)

# Using Material Scheduling

## Suggested steps for getting started

The following are some steps you can follow to get started:

- (1) Understand and set the Material Scheduling System Variables – the system variables control how things are done in the system. If you do not set the system variables the way you want, the system may not work the way you want.
- (2) Read about material scheduling so you will be familiar with terminology and what material scheduling does.
- (3) Define material scheduling parameters for each item you want scheduled. Under Material Scheduling use **Item Schedule Data**
- (4) View and process requirements and planned orders. Under Material Scheduling use **Requirements** and **Planned Orders**

## Material Scheduling System Variables

The first thing you must do before using TFG4000 Material Scheduling is understand the system variables used by the application.

They are explained in the “Initial Setup” section of the “Material Scheduling Users Guide” and the “Initial System Setup” section in the “Getting Started Guide”.

TFG4000 is installed with certain features that can be changed. The features are controlled with system variables. There are at least two system variables you need to understand before you start using Material Scheduling.

**Material\_Scheduling** (default is “Yes”) – With this variable set to “No”, Material Scheduling will not run. With this variable set to “Yes”, Material Scheduling will process regularly based on the interval defined with system variable TFGMaterialScheduleTrigger.

**TFGMaterialScheduleTrigger** (installation default is “5”) – This variable indicates the interval in minutes between Material Scheduling processing. With this variable set to **0**, material scheduling will not run. Set it to **1** or higher to begin material schedule processing.

For more information about viewing and setting system variables see the System Variables screen in the System Administration User Guide included on the TFG4000 CD, which is available from the Windows “Start” menu or from the “Documentation” menu within TFG4000. The documentation is also available online.

## What You Need to Know About Material Scheduling

To use TFG4000 Material Scheduling there are you few things you need to know.

### What is material scheduling?

Many items are either manufactured or purchased. As demand for an item exceeds the supply more must be built or purchased. The demand for an item is based on requirements and supply is either available inventory or pending orders such as job orders or purchase orders. TFG4000 Material Scheduling uses the information provided for an item to monitor supply and demand to generate plans when inventory and pending orders are not enough for the current demand.

### **What are requirements?**

A requirement is demand for an item either from a line on a sales order or when that item is used as a component on a job order. Requirements are generated automatically in TFG4000 as sales orders and job orders are created and processed.

### **What are planned orders?**

When material scheduling processes an item and determines there is not enough supply to satisfy demand for the item, a planned order is generated for the quantity needed to satisfy the demand. Supply comes from available inventory, pending purchase orders, and pending job orders. Planned orders can be turned into job orders or purchase orders so supply can satisfy demand.

### **Screen Help and the Users Guide are your friends**

Every screen has help available that describes the screen and how to use it. Click the Help menu at the top of the screen and select Screen Help.

The Job Order Management Users Guide has a lot of useful information to help you use TFG4000 Job Order Management. It has step by step instructions for all of the functions available on every screen. It is always available from the "Documentation" menu at the top of the screen.

### **We want to hear from you!**

If you have any ideas or suggestions about how to make TFG4000 better including reports you would like to see, please let us know. Many of the features you see were implemented based on comments from people like you. You can call 770-844-8516 and leave a message or send email to [tfg4000@fredrickgroup.com](mailto:tfg4000@fredrickgroup.com)

# Using Preventive Maintenance

## Suggested steps for getting started

The following are some steps you can follow to get started:

- (1) Understand and set the Preventive Maintenance System Variables – the system variables control how things are done in the system. If you do not set the system variables the way you want, the system may not work the way you want.
- (2) Define your machines – enter machine (equipment) definitions because you need them to schedule events. Under Preventive Maintenance use screen **Machine**
- (3) Schedule maintenance events – Once you have machines defined you can start scheduling maintenance events. Under Preventive Maintenance use screen **Schedule**
- (4) Job orders (work orders) will be generated automatically for you so you will know what to do when it needs to be done. You can view and process them in Preventive Maintenance with screens under **Job Order** and **Job Activities**

## Preventive Maintenance System Variables

The first thing you must do before using TFG4000 Preventive Maintenance is understand the system variables used by the application.

They are explained in the “Initial Setup” section of the “Preventive Maintenance Users Guide” and the “Initial System Setup” section in the “Getting Started Guide”.

TFG4000 Preventive Maintenance is installed with certain features that can be changed. The features are controlled with system variables. There are some system variables you need to understand before you start using Preventive Maintenance. See the System Variables screen in the System Administration User Guide included on the TFG4000 CD, which is available from the Windows “Start” menu or from the “Documentation” menu within TFG4000. The documentation is also available online.

**Job\_Order\_Printer** (installation default is “**HP Laserjet Printer**”) – This variable indicates the default printer to be used for job order printing.

**Default\_City** (installation default is “**Cumming**” where The Fredrick Group, Inc. is located) – This variable defines the default city used when defining machines. You should change this to your city or blank it out if you do not want a default city.

**Default\_State** (installation default is “**Georgia**” where The Fredrick Group, Inc. is located) – This variable defines the default state used when defining machines. You should change this to your state or blank it out if you do not want a default state.

**Default\_ZipCode** (installation default is “**30040**” where The Fredrick Group, Inc. is located) – This variable defines the default zip code used when defining machines. You should change this to your zip code or blank it out if you do not want a default zip code.

**Form\_Logo** (installation default is **Cubelcon.gif**) – This variable contains the name of the logo file to use on special forms such as Job Order Forms, Packing Slips, and Invoices. The recommended logo size is 50x50 pixels. The logo can be smaller or larger and the system will size it to fit. If you would like your company logo to appear on forms, place your logo in .gif format in the \\Server\Images directory and set this variable to the name of the logo.

**Report\_Logo** (installation default is **Cubelcon.gif**) – This variable contains the name of the logo file to use on reports. The recommended logo size is 50x50 pixels. The logo can be smaller or larger and the system will size it to fit. If you would like your company logo to

appear on reports, place your logo in .gif format in the \\Server\Images directory and set this variable to the name of the logo.

Also, you should review the "Using Inventory Management" section of this guide since inventory management may be needed for preventive maintenance.

## What You Need to Know About Preventive Maintenance

To use TFG4000 Preventive Maintenance there are you few things you need to know.

### Some terminology

Here are some terms you will encounter in PM (Preventive Maintenance):

<b>Machine</b>	A piece of equipment or service. It can be an actual machine, a vehicle, even a building, or it can be something more abstract like performing a service such as calling a client or spraying for bugs.
<b>Event</b>	An event is a task that has been scheduled for a machine. An event can be scheduled based on frequency, completion of prior maintenance, or meter measurements.
<b>Meter</b>	Some equipment must have maintenance based on a meter measurement, such as how many miles a vehicle has been driven or how many strokes a piece of manufacturing equipment has performed.
<b>Job Order</b>	Event scheduling triggers a job order or work order that details what must be performed for a particular maintenance task. The job order can be modified, reported against, and printed as necessary.
<b>Process</b>	A set of steps to perform for a maintenance event. Each step is referred to as an <b>operation</b> .
<b>Kit</b>	A parts list of items and supplies needed to perform the maintenance as well as parts and supplies that were not originally scheduled but had to be used. For example, oil, cleaning fluid, replacement parts, etc.
<b>Picking</b>	As parts and supplies are used to complete a maintenance work order, the inventory must be updated. The picking process allows you to report items and supplies used so the cost can be logged.
<b>Feedback</b>	Cost incurred by an employee is reported via feedback.
<b>Load Analysis</b>	TFG4000 Preventive Maintenance has an analysis function to determine the usage or <b>load</b> that a machine, work center, or employee will have over a certain period of time. You can analyze the load information to determine how to distribute the load for maximum efficiency.

### The purpose of Preventive Maintenance

There are many tasks that must be performed on a regular basis to keep your business running smoothly. TFG4000 Preventive Maintenance provides a way for you to define those tasks and schedule them so the work can be done in a timely and efficient manner and to keep track of maintenance costs.

Sometimes there is a need for maintenance even though it has not been scheduled. In those cases a "Demand PM" order can be generated. This may be for repairs,



additional/supplemental maintenance, or because there is no discrete way to determine when work should be performed.

### **Scheduled events trigger job orders**

Once you have set up a schedule, job orders will be generated automatically. You can even set up schedules so that job orders are generated a few days before the actual task must be performed so preparations for the maintenance can be made in advance.

### **You don't need to pre-define anything to add a Demand PM job order**

Here's how easy it is to add a Demand PM job order:

1. Click the plus (" + ") next to "Preventive Maintenance" or double-click  "Preventive Maintenance" in the "NavTree".
2. Click "Job Order". The Job Order screen is displayed.
3. Click the Save button  located on the toolbar. A job order number is generated automatically and the order is inserted!

Of course, you may want more than that, so the job order has a place for you to enter the following:

- (1) A machine for which the maintenance is to be performed (remember a machine does not have to be an actual machine, it can be any kind of equipment and it can even be something more abstract, like performing a service such as mowing grass or calling a client)
- (2) A maintenance event
- (3) A kit of parts and supplies needed
- (4) Various dates
- (5) The process that must be followed to complete the order

As you can see, you don't have to have any of those things to add an order, they are there to use as you find necessary.

### **Picking is your "Shopping List"**

The picking function of Preventive Maintenance is like a shopping list. It tells you what you need and how many of them you need, it even tells you where to find them!

You can print the pick list and use it to locate and retrieve ("pick") the items you need. There is a place to indicate how many you picked from a particular inventory location as you go, or you can use the "Pick All" function to update all of them.

If you notice any negative inventory, verify you have your system configured to prevent negative inventory (see the Inventory Management section of this guide), and see how the item was defined. There is a field called "Stock Item" on the Item Definition screen. If an item is defined as "Stock Item" = No, it means you do not want to track inventory for that item and the system will allow the inventory for that item to go negative.

## **Screen Help and the Users Guide are your friends**

Every screen has help available that describes the screen and how to use it. Click the Help menu at the top of the screen and select Screen Help.

The Preventive Maintenance Users Guide has a lot of useful information to help you use TFG4000 Preventive Maintenance. It has step by step instructions for all of the functions available on every screen. It is always available from the "Documentation" menu at the top of the screen.

## **We want to hear from you!**

If you have any ideas or suggestions about how to make TFG4000 better including reports you would like to see, please let us know. Many of the features you see were implemented based on comments from people like you. You can call 770-844-8516 and leave a message or send email to [tfg4000@fredrickgroup.com](mailto:tfg4000@fredrickgroup.com).

# Using Warehouse Management

## Suggested steps for getting started

The following are some steps you can follow to get started:

## Suggested steps for getting started

The following are some steps you can follow to get started:

- (1) Understand and set the Warehouse Management System Variables – the system variables control how things are done in the system. If you do not set the system variables the way you want, the system may not work the way you want.
- (1) Define your items – items must be defined before they can be used. Under **Warehousing** use screen **Warehouse Item**
- (2) Define your inventory locations – inventory locations must be defined before they can be used. They tell the system the capacity, usage, and any physical constraints the location may have. Under **Shared Applications** use screens **Warehouse, Zone, and Location**
- (3) Enter inventory – you'll need initial inventory balances. You can use cycle counting or adjustments to enter the initial balances. Under **Warehousing** use one of the screens under **Inventory**
- (4) Run Consolidation – make sure your inventory is not scattered unnecessarily. Under **Warehousing** use screen **Consolidation**
- (5) Run Putaway – store what you have on your receiving docks. Under **Warehousing** use screen **Putaway**
- (6) Run Replenishment – make sure locations with high usage are ready. Under **Warehousing** use screen **Replenishment**
- (7) Start processing ship orders and inventory – use your warehouse!

## Warehouse Management System Variables

The first thing you must do before using TFG4000 Warehouse Management is understand the system variables used by the application.

They are explained in the "Initial Setup" section of the "Warehouse Users Guide" and the "Initial System Setup" section in the "Getting Started Guide".

TFG4000 Warehouse Management is installed with certain features that can be changed. The features are controlled with system variables. There are some system variables you need to understand before you start using Warehouse Management. See the System Variables screen in the System Administration User Guide included on the TFG4000 CD, which is available from the Windows "Start" menu or from the "Documentation" menu within TFG4000. The documentation is also available online.

**Order\_Point\_Email** (installation default is blank) – Order Point processing will send email notification when the order point for an item has been reached. Normally the notification would be sent to the order point email address on the Order Point Item screen for the item, but if no email address was defined for the item, the system will send the notification to the default email address defined with the Order\_Point\_Email system variable. If you do not want a notification sent to a default email address, leave this variable blank.

**Order\_Point\_IM** (installation default is blank) – Order Point processing will send instant messenger notification when the order point for an item has been reached. Normally the notification would be sent to the order point IM address on the Order Point Item screen for the item, but if no IM address was defined for the item, the system will send the notification to the default IM address defined with the Order\_Point\_IM system variable. If you do not want a notification sent to a default IM address, leave this variable blank.

**PreDefine\_Lots** (installation default is **"Yes"**) – With this variable set to **"Yes"**, a lot number must be pre-defined before inventory can be received for that lot. With this variable set to **"No"**, a lot can be received without pre-defining the lot number, but lots can be pre-defined if desired.

**WMS\_Allow\_Negative\_Inventory** (installation default is **"No"**) -- With this variable set to **"No"**, on hand inventory balance cannot be negative. An inventory transaction that would cause the on hand balance to go negative will be rejected as error. With this variable set to **"Yes"**, on hand inventory balance can be negative. No inventory transactions will be rejected.

**WMS\_Automatic\_Replenish\_List** (installation default is **"Yes"**) – With this variable set to **"Yes"**, locations defined as usage **"Replenish"** will be monitored and when inventory levels fall below the percentage allowed (see **WMS\_Replenish\_Percentage** below) a replenishment list will be generated. If inventory is available, the list will indicate where the inventory to replenish the location will come from. With this variable set to **"No"**, replenishment lists must be generated manually. The system will still determine where inventory will come from, but the process will not happen automatically as with **"Yes"**.

**WMS\_Consolidation\_Percentage** (installation default is **"10"**) – This variable indicates the percentage of the maximum pallet quantity that will be used to select the **"From"** locations during consolidation. For example, if the quantity in the location is 10 and the maximum for the item is 100 then the location is 10% of the maximum. If the consolidation percentage requested is 10% this location would not be selected because it is not less than 10% of the maximum. If the requested percentage is 15% then the location would be selected as a candidate.

**WMS\_Merge\_Lots** (installation default is **"Yes"**) – When this variable is set to **"Yes"**, system generated lists can use inventory from locations even if the lot number is not the same as the lot number in the location where the inventory will be moved. When this variable is set to **"No"**, a location with a lot number that is different from the lot number where the inventory would be moved will not be selected.

**WMS\_Merge\_Pools** (installation default is **"Restricted"**) – This variable controls how inventory is selected for system generated lists. Pools can have one of three types – Unique, Shared, and General. This variable has three different values **"No"** select inventory only if the pool is the same; **"Restricted"** look for same pool first, then if type is Shared check other Shared pools, then check for pool type General, then check for no pool at all; **"Yes"** select inventory regardless of pool.

**WMS\_Replenish\_Percentage** (installation default is **"50"**) – This variable indicates the percentage of inventory that will trigger replenishment orders for replenish locations. When on hand quantity as a percentage of the maximum quantity that can be stored in a location falls below this percentage, a replenishment order is triggered.

## What You Need to Know About Warehouse Management

To use TFG4000 Warehouse Management there are you few things you need to know.

### Some terminology

Here are some terms you will encounter in Warehouse Management:

- Picking** Warehouse Management builds lists of items that must be retrieved from inventory to satisfy a shipping order. These lists are called "pick lists" and the activity when retrieving inventory is called "picking".
- Putaway** As inventory is received it must be stored or "put away". The Warehouse Management putaway process uses an algorithm to determine where inventory should be stored. A putaway list is generated indicating the receiving location and the destination storage location.
- Consolidation** Over time inventory may become scattered throughout the warehouse. The Warehouse Management consolidation process determines how inventory can be rearranged so that smaller quantities are moved together to make room for larger quantities.
- Replenishment** A location can be defined as type "Replenish" indicating it usually contains items that are cycled through inventory relatively quickly so the location must be kept filled. When an item in a replenish location falls below a pre-defined level a replenishment build is triggered. If inventory is available to replenish the location, a list is built detailing where the inventory is located and the quantity that can be used for replenishing.

### The purpose of Warehouse Management

Running a warehouse can be a complicated task. Warehouse Management helps you maintain control over your warehouse by managing the movement of inventory from storing inventory received to fulfilling orders and keeping the entire warehouse organized.

### Screen Help and the Users Guide are your friends

Every screen has help available that describes the screen and how to use it. Click the Help menu at the top of the screen and select Screen Help.

The Warehouse management Users Guide has a lot of useful information to help you use TFG4000 Warehouse Management. It has step by step instructions for all of the functions available on every screen. It is always available from the "Documentation" menu at the top of the screen.

### We want to hear from you!

If you have any ideas or suggestions about how to make TFG4000 better including reports you would like to see, please let us know. Many of the features you see were implemented based on comments from people like you. You can call 770-844-8516 and leave a message or send email to [tfg4000@fredrickgroup.com](mailto:tfg4000@fredrickgroup.com)

# Using Shared Applications

## What You Need to Know About Shared Applications

To use TFG4000 Shared Applications there are you few things you need to know.

### What are the Shared applications and what uses them?

<b>Accounts</b>	The accounts area of Shared applications allows you to define many different kinds of accounts including bank accounts, AR accounts, AP accounts, etc. Accounts are used by TFG4000 financial applications.
<b>Calendar</b>	The calendar area of Shared functions allows you to define the non-working days for a year. The calendars you define are used by either Material Scheduling or Preventive Maintenance.
<b>Carrier</b>	With the carrier screens you can define freight carriers whose services you employ to ship things. The carrier information is used by Sales Order Management and Warehouse Management.
<b>Customer</b>	With the customer screens you can define entities with whom you do business. Customer information is used by Sales Order Management and Warehouse Management.
<b>Employee</b>	The employee screens provide a place for you to enter information about your employees including address and contact information. Employee data is used by Job Order Management, Preventive Maintenance, and Warehouse Management.
<b>Item Definition</b>	The item definition screens allow you to store basic information about the things you build, sell, and use in your business. You must define items before you can use them. Items are used in most of the TFG4000 applications.
<b>Location</b>	With the location screens you can define inventory storage locations. You must define locations before you can use them. Locations are used by Inventory Management, Job Order Management, Sales Order Management, Material Scheduling, Purchasing Management, Preventive Maintenance, and Warehouse Management.
<b>Manufacturer</b>	Manufacturers are the people or companies who produce the things you use in your business. They may or may not be the entity from whom you purchase or acquire items. Manufacturer data is used by Inventory Management.
<b>Messaging</b>	Certain processes in TFG4000 produce messages based on activity or errors. The messaging area of Shared applications provides a way to view messages that have been logged. Messages are produced by most of the TFG4000 applications.
<b>Pool Definition</b>	Pools are used for logical segregation of inventory such as distribution inventory versus OEM inventory. Pools are used by Preventive Maintenance and Warehouse Management (future use in all other applications)

<b>Supplier</b>	Suppliers are the people or companies from whom you purchase or acquire goods, materials, services, etc. Supplier information is used by Purchase Order Management and Warehouse Management.
<b>Warehouse</b>	The warehouse screens allow you define physical and logical warehouses. Warehouses are used by Inventory Management, Job Order Management, Sales Order Management, Material Scheduling, Purchasing Management, Preventive Maintenance, and Warehouse Management.
<b>Work Center</b>	Work centers are physical or logical areas used to group machines, people, work etc. Work centers are used by Job Order Management and Preventive Maintenance.
<b>Zone</b>	Zones are physical and logical divisions within warehouses. They are used by Inventory Management, Job Order Management, Sales Order Management, Material Scheduling, Purchasing Management, Preventive Maintenance, and Warehouse Management.

### **The purpose of Shared Applications**

The Shared applications area contains information used by multiple TFG4000 applications. Since they are not specific to any one application they are maintained as a separate group and provided with all applications.

### **Screen Help and the Users Guide are your friends**

Every screen has help available that describes the screen and how to use it. Click the Help menu at the top of the screen and select Screen Help.

The Shared Applications Users Guide has a lot of useful information to help you use TFG4000 Shared Applications. It has step by step instructions for all of the functions available on every screen. It is always available from the "Documentation" menu at the top of the screen.

### **We want to hear from you!**

If you have any ideas or suggestions about how to make TFG4000 better including reports you would like to see, please let us know. Many of the features you see were implemented based on comments from people like you. You can call 770-844-8516 and leave a message or send email to [tfg4000@fredrickgroup.com](mailto:tfg4000@fredrickgroup.com)

# Using System Administration

## TFG4000 System Variables

The first thing you must do before using TFG4000 is understand the system variables used throughout the system. They are explained in the "Initial Setup" section of the "System Administration Users Guide" and the "Initial System Setup" section in the "Getting Started Guide".

TFG4000 is installed with certain features that can be changed. The features are controlled with system variables. There are a few system variables you need to understand before you start using TFG4000. See the System Variables screen in the System Administration User Guide included on the TFG4000 CD, which is available from the Windows "Start" menu or from the "Documentation" menu within TFG4000. The documentation is also available online.

**Security** (installation default is "No") -- With this variable set to "No", anyone using the system has access to all of the applications, screens, and functions; the Windows user id is logged every time data is inserted or updated. With this variable set to "Yes", each person using the system must have a user id and password and varying degrees of access can be set for each user; the TFG4000 user id is logged every time data is inserted or updated. A User ID is not required when security is off. However, if you choose to turn security on, there are two default User ID's installed with the system: "Admin" (password "Admin") and "User" (password "User"). You should change the passwords of the default User ID's.

**Form\_Logo** (installation default is **Cubelcon.gif**) – This variable contains the name of the logo file to use on special forms such as Customer Order Forms, Purchase Order Forms, Job Order forms, Packing Slips, and Invoices. The recommended logo size is 50x50 pixels. The logo can be smaller or larger and the system will size it to fit. If you want your company logo to appear on forms, place your logo in .gif format in the \\Server\Images directory and set this variable to the name of the logo. (**Note:** The Report\_Logo variable was used in previous releases of TFG4000 for forms, so you may need to check this variable).

**Report\_Logo** (installation default is **Cubelcon.gif**) – This variable contains the name of the logo file to use on reports. The recommended logo size is 50x50 pixels. The logo can be smaller or larger and the system will size it to fit. If you want your company logo to appear on reports, place your logo in .gif format in the \\Server\Images directory and set this variable to the name of the logo.

**Screen\_Logo\_Image** (installation default is **Cubelcon.gif**) – This variable contains the name of the logo file to use above the navigation tree (NavTree) on the left side of the screen. The recommended logo size is 50x50 pixels. The logo can be smaller or larger and the system will size it to fit. If you want your company logo to appear above the NavTree, place your logo in .gif format in the \\Server\Images directory and set this variable to the name of the logo.

**TFGTriggerController** (installation default is "1") – This variable indicates the interval in minutes between general trigger processing. With this variable set to **0**, background utilities, Preventive Maintenance scheduling, and certain Warehousing processes will not run. Set it to **1** or higher to allow trigger processing.

**Welcome\_Logo** (installation default is **Cubes.gif**) – This variable contains the name of the logo file to use on the Welcome screen. The recommended logo size is 300x300 pixels. The logo can be smaller or larger and the system will size it to fit. If you want your company logo to appear on the Welcome screen, place your logo in .gif format in the \\Server\Images directory and set this variable to the name of the logo.

## What You Need to Know About System Administration

To use TFG4000 System Administration there are you few things you need to know.

### The purpose of System Administration

The System Administration area of TFG4000 contains screens that are used for overall control of TFG4000. They are usually restricted to use by people within an organization responsible for the security and integrity of the system.

### The functions within System Administration

System Administration contains the following:

#### Database

##### Definitions

There are many database tables contained within the TFG4000 system. The tables are listed and their columns are listed on this screen. This information can be used for import/export and for external report writers.

##### Dropdown

##### Control

TFG4000 has many lists used by various fields within the system. Some of these lists or "dropdowns" can be modified using Dropdown Control.

##### Label Definition

Various labels can be printed from TFG4000. The physical format of the labels can be defined and maintained with the Label Definition screen and the layout of the labels can be defined and maintained with the Label Format screen.

##### Message

##### Distribution

Many of the TFG4000 processes write messages when activity occur and when errors are detected. Message Distribution allows you to choose who should receive those messages and how they should receive them.

##### Serial Numbers

Access to the applications within TFG4000 is controlled by serial numbers. This screen lists all of the serial numbers your company has licensed and it allows the administrator to enter new serial numbers.

##### System Setup

The TFG4000 server uses information provided by a system configuration or .ini file. The settings in the .ini can be viewed and maintained with System Setup.

##### System Variables

Many of the functions within TFG4000 are controlled by system settings called "system variables". The system variables contain values that indicate how your organization wants things done. For example, there is a system variable called Allow\_Negative\_Inventory that determines whether or not the on hand balance for an item is allowed to become negative. The administrator sets the system variables using this screen. There is also a screen called "UOM Conversion" for defining how unit of measure conversions are to be calculated.

- Trigger Control** Some of the applications in TFG4000 have work that is performed in the background with no need for user intervention. This work is started by special records or "triggers" that determine what work must be done. The trigger control screens allow the administrator to monitor trigger activity and to stop/start trigger processing as needed.
- User Control** Where users are defined to the system. It includes what screens and reports they are allowed to use and to what extent they can use them (Not at all, ready only, full access including any kind of updates). There is also a screen called "Signed On Users" so administrators can see who is currently using TFG4000.
- Utility Control** TFG4000 provides several utilities for managing the data: Database back, Database Restore, Database Compact, Data Import, and Data Export in addition to many application specific utilities. These utilities are available in Utility Control.
- Welcome** The first screen you always see when you start TFG4000. This screen has useful information about help that is available in TFG4000 as well as information for new users. TFG4000 software registration is available from this screen as well as a system setup function which prompts you for system variable settings.

### **Screen Help and the Users Guide are your friends**

Every screen has help available that describes the screen and how to use it. Click the Help menu at the top of the screen and select Screen Help.

The System Administration Users Guide has a lot of useful information to help you use TFG4000 System Administration. It has step by step instructions for all of the functions available on every screen. It is always available from the "Documentation" menu at the top of the screen.

### **We want to hear from you!**

If you have any ideas or suggestions about how to make TFG4000 better including reports you would like to see, please let us know. Many of the features you see were implemented based on comments from people like you. You can call 770-844-8516 and leave a message or send email to [tfg4000@fredrickgroup.com](mailto:tfg4000@fredrickgroup.com)