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# MAPCON



# Quick Tour

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## Quick Tour Introduction

### MAPCON CMMS Software

*(both versions)*

## MAPCON LITE *and* MAPCON PRO

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Updated September 2016

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Thank you for using MAPCON® – *Easy to use. Powerful software. Priced right.*

This guide is intended to help you get started using *MAPCON* quickly. Starting on the right track will help you and your company utilize the system efficiently for years to come.

Note: This guide applies to both versions, *MAPCON Lite* and *MAPCON Pro* both hosted (*On-Demand*) and server based (*your server*). With *server based*, your IT Dept. is responsible for the server and performing backups, and with *hosted* Mapcon Technologies will host the server. The rest of this guide will refer to everything as just MAPCON.

After using this guide, refer to the MAPCON User Manual for more detailed information.

The screens and menus used in this guide are from to Pro version so we can illustrate full functionality. We have made notes along the way to indicate what is only available in the Pro version.

If you have any questions, call your knowledgeable MAPCON Support Specialist for fast friendly service at (800) 223-4791.

Thank you for your business!



Disclaimer:

We have tried to make this manual as accurate and complete as possible. However, some errors may exist. MTI cannot accept responsibility for losses due to the use of information in this manual. If errors are discovered in the manual, written suggestions should be directed to:

MAPCON Technical Writer  
Mapcon Technologies, Inc.  
8191 Birchwood Ct., Ste. A  
Johnston, IA 50131

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## INTRODUCTION

MAPCON is a valuable tool to help you organize your maintenance activities and reduce your maintenance costs.

This guide will help you get MAPCON setup and running as quickly as possible.

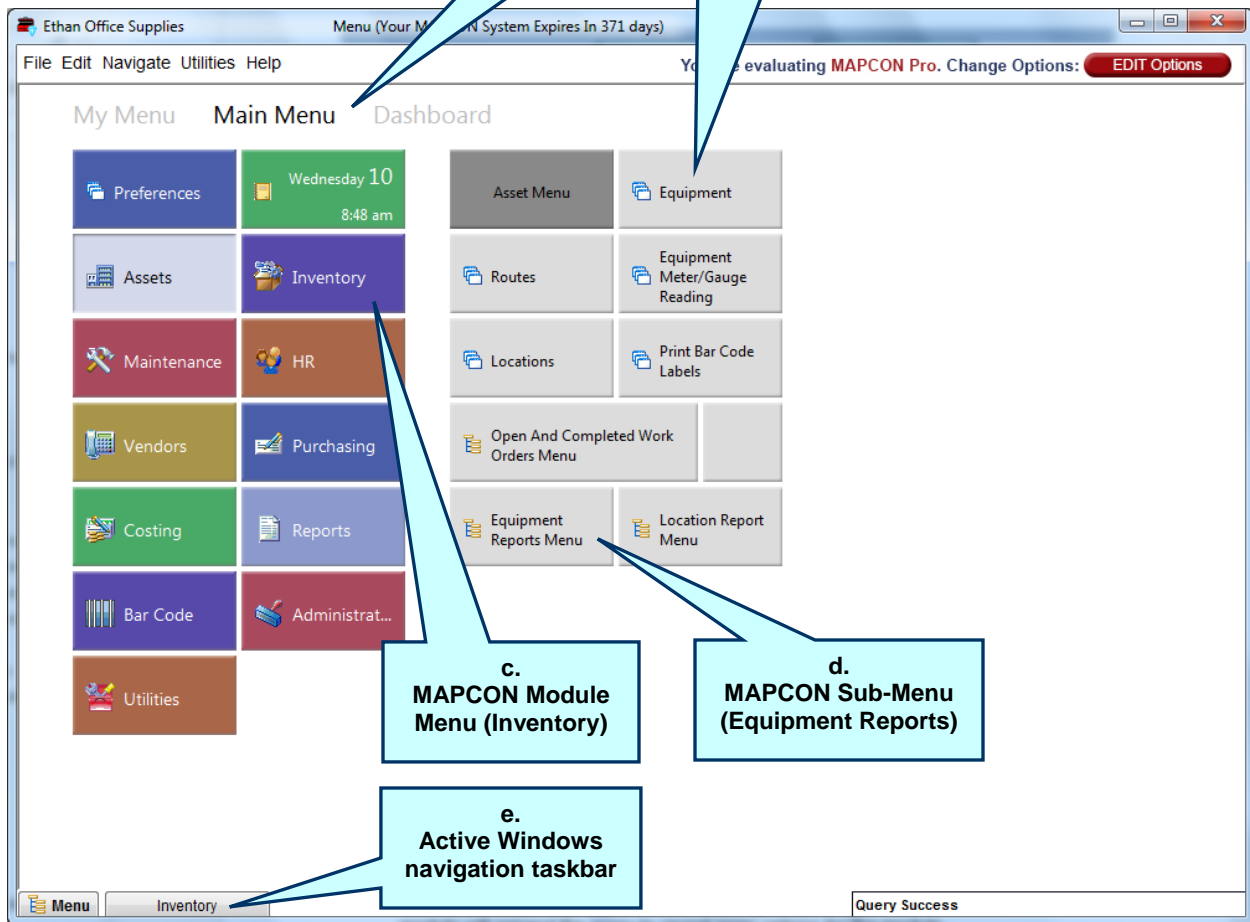
For more information:

- In each field, press [**F1**] for more detailed information or click the **Help** button at the top of the window.
- Consult the *MAPCON User Manual* regarding any topic.
- Our experienced professionals can help you find what you need. Contact our knowledgeable Support Specialists at **800-223-4791**.

## LOGGING INTO MAPCON

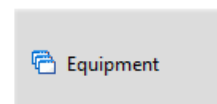
Once you have filled out the form for the evaluation, you will be brought to the login screen. Simply enter the username and password you picked, and then click Login.

## OVERVIEW

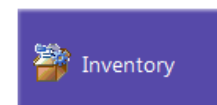



a. The MAPCON main menu area gives you a Windows 8 style Tile Menu selection of the many options in MAPCON.

b. MAPCON Windows are accessed with this type of tile. This is an example of the Equipment Data Entry screen.



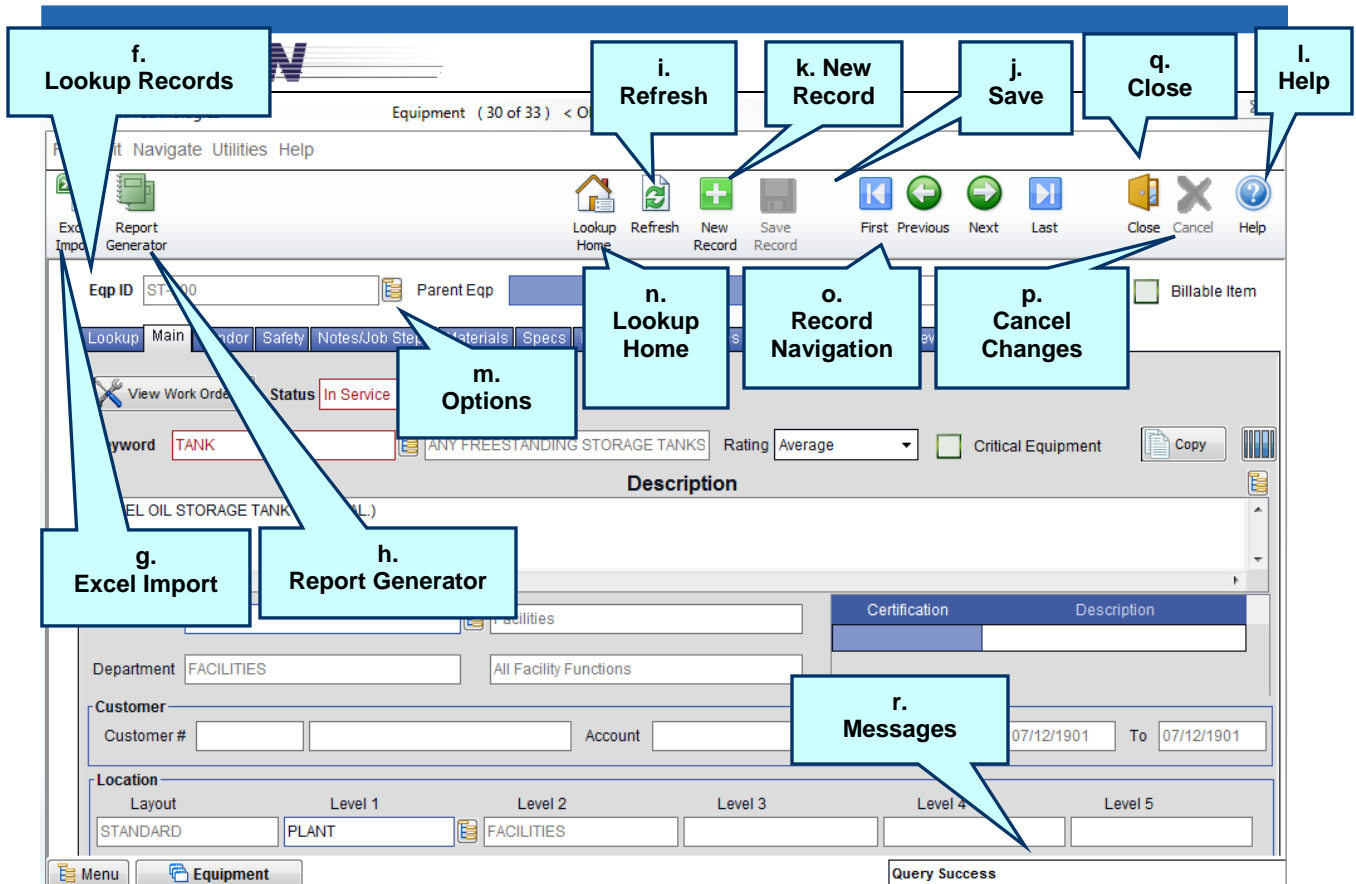
c. Each main module has its own tile. Clicking the tile for any given module will expand the menu to reveal more options for the module on the right.



d. Inside each main module are sub-menus with more categorized options. To access these menus, click on tiles that contain the following icon:  This will expand the menu system to reveal the options of the sub-menu.



e. Quickly access the Main Menu or other open windows from the items on the MAPCON Active Window task bar.

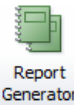


## Controls

- f. To search records, click the **Lookup** tab. Use lookup filters and sort options to modify the search criteria. Click on lookup headers to sort by any column in ascending or descending order. Double-click on a lookup row to load it in to the window.



- g. Click **Excel Import** to import data from a Microsoft Excel™ spreadsheet.



- h. Click **Report Generator** to start creating a report based on the data entry window.



- i. Click **Refresh** to refresh the data in a lookup or on a screen.



- j. Click **Save** to save changes to any record.






k. Click **Add** New Record to create a new record

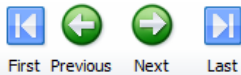


l. Click **Help** Help to display helpful information for the field or screen.

m. Next to many data entry fields you can click **Options**  to view a list of appropriate options for that data entry field. Options may include lookups, cut, paste, copy, etc. You can also access these options by right clicking on the field.



n. Click **Home** Lookup Home to clear the window, refresh the lookup and navigate to the lookup tab.



o. Use **Record Navigation** to move forward, backward, go to the last record or to the first record in the lookup



p. Click **Cancel** Cancel to clear a window without saving changes.



q. Click **Close** Close to close the window.

r. Messages display the status of MAPCON operations.

Query Success

**Tech Tip:** Hover the cursor over any icon for a brief help message. However, if the icon is not active, the help message will not appear. These icons are the same for all windows.

## Ease of Use Colors

**Red**      **Required**      A record cannot be saved until each red field has data. For example:



**Dark Blue**      **Optional**      Optional fields are additional fields that are not required.









**Grey**      **Display Only**      Read-only fields. The cursor will not land on these fields.



## Lookups

The screenshot shows the MAPCON software interface with a 'Lookups' window. The window has a header with 'Eq ID' and 'Parent Eq'. Below the header is a 'Sort Selection' dropdown menu set to 'Equipment Numbers'. To the right is a 'Site / Zone selection' dropdown menu set to 'Main - Manufacturing'. Further right is a 'Filter Options' button. The main area is a table titled 'Results' with columns: 'Equipment ID', 'Equipment Keyword', and 'Equipment Description'. The first row is highlighted in blue. Below the table is a 'Selection Bar' with a 'Menu' button and an 'Equipment' button. At the bottom right, there is a 'Query Success' status indicator.

Equipment ID	Equipment Keyword	Equipment Description
1-M004	CONVEYOR_BELT	C1 Belt Conveyor - Ship C2
1-M008	FAN	
1-M010	BLOWER	
1-M012	CONVEYOR_BELT	
1-M027	CONVEYOR_BELT	C2 Belt Conveyor - ship to silo
10-100	TRANSFORMER	#10 1500/2000 KVA DRY-TYPE SUBSTATION WITH 480 VOLT SWITCHGEAR
1000	DISCHARGER	Ship Unloader 1 400t/h
102	LINE-2	PRODUCTION-LINE 2 MAIN PLANT
102-200	SYSTEMS-CONTROL	CONTROL SYSTEM AND INSTRUMENT PANEL LINE-2
102-200-1	CIRCUITS	SUB PANEL CIRCUITS -LINE 2

- Use the **Column Search**    to find records containing the text as you type. Click individual columns to search that particular column. Click  to find the next occurrence.
- Use the **Sort Selection**   dropdown to select a different lookup view. Lookups can vary from different sorts, different columns and different types of data, such as planned work orders versus completed work orders.
- The **Site and Zone Selection**   dropdown option provides a quick filter based on an item's zone (i.e.: Equipment) or site (i.e.: Inventory). If the user has access to only one size or zone, then this option is not displayed.
- Click  to access the lookup's **Filter Options**.
- Click on any column header to sort the lookup by that column. The  icon indicates an ascending sort, and the  icon indicates a descending sort.
- Double-click or press enter on the **Selection Bar** (the highlighted row) to load and view the record.

## Lookup Filters


The screenshot shows the MAPCON Lookup Filters interface. At the top, there is a toolbar with several icons. Callout 'a' points to the 'Available Filters' list on the left. Callout 'b' points to the 'Clear Filters' icon (a trash can). Callout 'c' points to the 'Filter Defaults' icon (a folder). Callout 'd' points to the 'Add Filter Default' icon (a folder with a plus sign). Callout 'e' points to the 'Enter Filter Criteria' input field. Callout 'f' points to the 'Delete Filter Default' icon (a folder with a minus sign). Callout 'g' points to the 'Close / Refresh Filters' icon (a refresh symbol). Below the toolbar, there is a section titled 'Filter the Results with Values Entered Here' containing a table with columns 'Filter' and 'Value(s)'. The 'Equipment Keyword' section on the right contains a table with columns 'Equipment Keyword' and 'Equipment Description'. The 'Results' section at the bottom contains a table with columns 'Equipment ID', 'Equipment Keyword', and 'Equipment Description'.


Filter	Value(s)
Description Containing	
Equipment Keyword	CONVEYOR_BELT
Model #	
Serial #	12445
Departments	
Cost Centers	10-3

Equipment Keyword	Equipment Description
CONVEYOR_BELT	CONVEYOR_BELT

Equipment ID	Equipment Keyword	Equipment Description
1-M004	CONVEYOR_BELT	C1 Belt Conveyor - Ship C2
1-M012	CONVEYOR_BELT	Magnet with belt
1-M027	CONVEYOR_BELT	C2 Belt Conveyor - ship to silo

a. Select from the scrollable **Available Filters** list.


b. Click the **Clear Filters**  icon to remove all of the filter criteria you entered.


c. Use **Filter Defaults**  to load frequently used filter criteria. Each user can create their own list of filter defaults for any lookup.

d. Click  to **Add a Filter Default** for the current filter criteria.

e. Enter the filter criteria. Filter criteria can be text, dates, dropdowns, numeric or validated values as shown in this example. Lookups are always available for validated values. The right hand side will change to reflect the type of filter highlighted on the left.

f. Click  to **Delete the Filter Default** currently loaded (step c).

g. Click  to close the filter window and refresh the lookup for the selected criteria.

Alternatively, click  **Refresh** in the top toolbar to refresh the lookup while viewing the filter options.

## BASIC IMPLEMENTATION GUIDELINES

MAPCON provides a logical place to organize your maintenance activities.

Your goal is to put the right person at the right place at the right time with the right tool to get the job done right and as efficiently as possible.

The time frame to enter data and fully implement MAPCON depends on many factors, such as the number of users to setup, how much of the system is used, what corporate standards must be integrated, and if any data can be imported from existing sources.

Some operations are up and running within a week or two of installation, while others can take up to six months or a year before seeing results. The industry standard for most facilities to realize actual cost savings from their CMMS is two years.

Having an organized, planned approach to implementing the system will save valuable time later on.

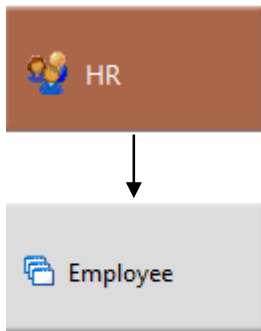
Use this guide to help you get started on the right track in MAPCON.

**Note:** You must have the appropriate security and authorizations to perform or even be able to see some of the following Menu Options, Screens or other functions. In other cases, your particular system may have been changed to fit the needs of your company. In this case, menu options may be deleted, changed or new menus may be presented. Because of the high degree of flexibility and customizability of MAPCON we cannot cover any cases but that of a standard “out-of-the-box” MAPCON System.

**Note:** Although you can get started creating work orders quickly by following this guide, most companies will want to go back and set Software Switches, create Codes, and setup Validation files before using the system more thoroughly.

The **Basic Implementation Guidelines** surrounded by the **bold border** are covered in this guide.

## Employee Data Entry



Click the **Human Resources Menu**  
Click the **Employee** menu option.

**Note:** Employee information is accessible on the User Profile as well.

Enter an **Employee number**, then press [Enter].

The number can be alpha-numeric, and some sites may choose to use a “smart” numbering system.

Examples of Employee Numbers: Company assigned #, name, login ID, email address, first initial and last name, etc.

Employee ID  Last Name  First  MI

Lookup Main Personal Emp. Dependents Compensation Revisions

Zone  Main Revision   Active

Display Name  Department   Weekends

Title  EMail

Crew  MASTER CREW #5 Craft  PLANT INSPECTOR

Shift  Day Shift Internal Phone  Home Phone


Address  Country  Cell Phone

City  Emergency

State  Zip

Enter the employee's **First** and **Last** name, and their middle initial. Notice how the system formats the **Display Name**. The **Display Name** is displayed on employee based reports, such as the employees by craft report. Feel free to change its format, such as to put the last name first.

Assign a **Zone** to the employee. The system will add your primary zone as a default zone for the employee. Double-click the Zone field to select a different zone.

Click the options icon  to select the appropriate Crew, Craft, and Shift. Use the Add option to create new records without having to close or leave this window.



Click **Save** at the top of the window when finished.

## Creating Departments and Cost Centers

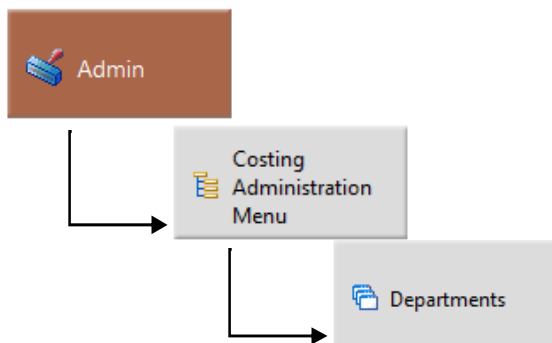
For a quick start, this is optional. However, it is recommended to use Cost Centers for more efficient tracking of labor, material, and purchasing costs.

Cost Centers are like budget centers that determine who pays for the completed work. Work orders can be written directly against a Cost Center. Equipment and Locations have a designated Cost Center that is updated when a work order is written against them directly.

A cost center cannot be created in MAPCON unless it is tied to a Department\*, therefore, at least one Department must be created first.

\* A software switch can be changed so that Departments are not required. Under System Configuration, Cost Accounting Configuration, check the box "Allow department changes on Equipment and Locations instead of cost centers". Save changes and logout and login.


### Create Departments





Click the **Admin menu**  
Click the **Costing Administration Menu**  
Click the **Departments** menu option.

A Department is the area responsible for costs and expenditures. Examples of Department names include Maintenance, Engineering, Administration, etc.


Enter the Department **Name** and its **Description**.

Click **Save**  at the top of the window.

Click **Close**  at the top of the window.

Dept    Requisition Approval Group

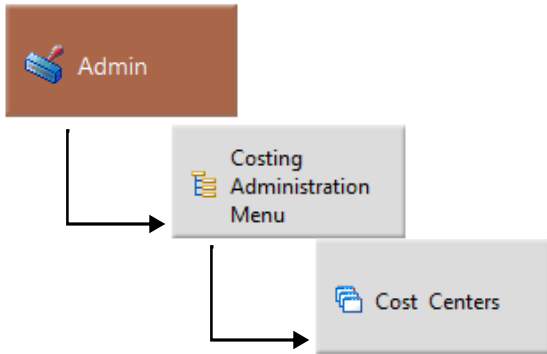
Lookup

Sort By  

**Results**

Department ▲	Department Description
ADMINISTRATIVE	All Administration Areas
BUILDING	Building Complex
<b>ENGINEERING</b>	Engineering Areas
TRANSPORTATION	All Transportation Areas

## Create Cost Centers



Click the **Administration menu**  
Click the **Cost Administration Menu**  
Click on the **Cost Centers** menu option

Enter the **Cost Center Number**. Your internal administration or accounting department will likely have numbers already defined for various areas.

Enter the Cost Center **Description**


Cost Center  Description

Department  All Facility Functions Cost Center Rating

Lookup

Sort By

Cost Center ▲	Description	Department
1	Administration	ADMINISTRATIVE
10	Asset Adjustment Costs	ADMINISTRATIVE
10-2	Variance Costs	ADMINISTRATIVE
10-3	Motor Pool Parts Variance Costs	TRANSPORTATION
1000	Maintenance Supplies	FACILITIES
1100	Write Offs	FACILITIES
1200	Facilities	FACILITIES

Enter a **Department**. Click the options icon  to display a Lookup of available departments. Or, simply double-click the department field itself to display a lookup.

That is all the information needed to start using cost centers, however, other items can be tied to a cost center, such as PM Procedures, Safety Procedures, job steps and a bill of materials.



Click **Save** at the top of the window when finished.

COST CENTER SETUP IS COMPLETE.

## SETTING UP EQUIPMENT AND LOCATIONS

### Creating Equipment Keywords

Work Orders can be written for Equipment, Locations, Cost Centers, or Routes. Equipment records must have an equipment Keyword. Hence, the first step is to create at least one keyword.

A Keyword is simply a category used to keep similar pieces of equipment together. Reports and Lookups sort equipment based on the keyword and have keyword filters.

#### Examples of good keywords:

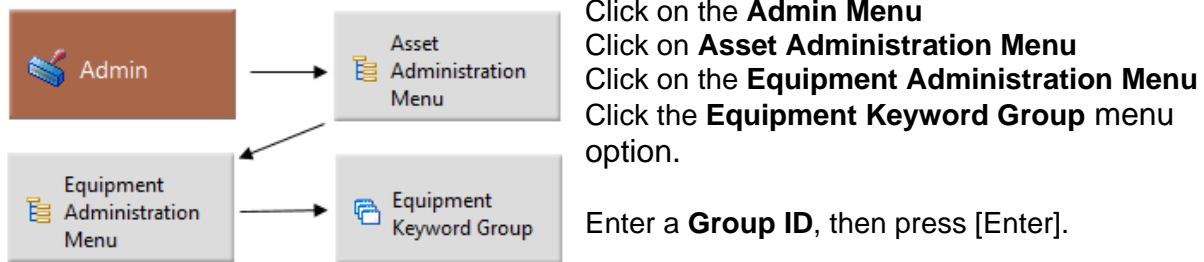
MOTOR	BELT	PUMP
MOTOR-AC	BELT-CONVEYOR	PUMP-ELECTRIC
MOTOR-DC	BELT-FAN	PUMP-WATER

#### Examples of bad keywords:

AC MOTOR	CONVEYOR BELT	ELECTRIC PUMP
DC MOTOR	FAN BELT	WATER PUMP

Before creating equipment keywords, create at least one **Equipment Keyword Group**. The keyword group will allow you to group together similar keywords. For instance, the keywords MOTOR-AC and MOTOR-DC could be grouped together under the keyword group MOTORS.

### Enter Equipment Keyword Groups



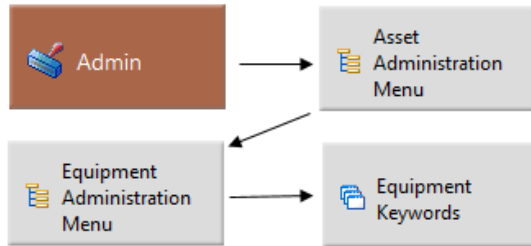
Keyword Group

Group ID ▲	Description
FACILITY	Facilities
<b>MOTOR</b>	<b>All AC and DC Motors</b>
PLANT	Plant Operations
VEHICLE	Automotive

Enter the Keyword Group **Description**. Click **Save**  at the top of the window when finished.



## Enter Equipment Keywords



Click the **Admin Menu**  
 Click the **Equipment Administration Menu**  
 Click the **Equipment Keywords** menu option.

Enter a **Keyword**, and **Description**. Then, assign a **Keyword Group**.

ID   Group

Lookup Main

Titles
CONTACTORS
HORSEPOWER
LINE VOLTAGE
MANUAL STARTER
RELAY
SAFETY DEVICE
SIZE

These specification titles will appear on equipment records having this keyword. Each title will have an associated value for the equipment item, such as 300hp for Horsepower.

There is no limitation on the number of titles.

### Optional – Equipment Specification Titles (Nameplate data)

Examples of Specification Titles for the following 3 keywords:

**Motor**

Line voltage  
 Starter  
 Horsepower  
 Size

**Pump**

Valve Type  
 Filter Type  
 Lubrication Specs

**Forklift**

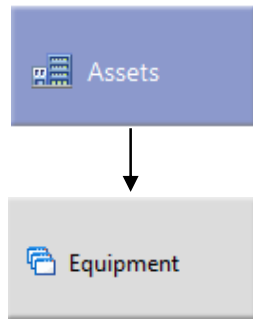
Capacity (lbs)  
 Load Center  
 Lifting Height  
 Weight

Many of the Specifications come from nameplates. For the Title, enter only the generic name here. The actual number, rating, setting, type, etc. is input on the Equipment Data entry window.



Click **Save** at the top of the window when finished.

## Creating Equipment



Click the **Assets Menu**  
Click the **Equipment** menu option.

Only the Red (required) fields must be entered before the record can be saved.

Eq ID  Parent Eq

Lookup Main Vendor Safety Notes/Job Steps Materials Specs PMS Meters Gauges Attachments Costs Revisions

View Work Orders Zone  Manufacturing Status

Keyword  ALL ELECTRICAL TRANSFOF Rating    Critical Equipment

**Description**

#10 1500/2000 KVA DRY-TYPE SUBSTATION WITH 480 VOLT SWITCHGEAR

Cost Center  Engineering

Department  Building Complex

**Location**

Layout	Level 1	Level 2	Level 3	Level 4	Level 5
STANDARD	MAIN	FACILITIES	COOLTOWERS		


Enter an **Eq ID** (Equipment Number) and then press [Enter]. Most facilities already have asset numbers established. Some use a “smart” numbering system while others just use the Manufacturer’s number. If you require assistance defining your equipment numbering scheme, contact MAPCON Support.


Alternative– Just press [Enter] and the system will generate a new key which will be displayed after saving the record. Automatic key generation is not the default configuration for Equipment. However, the system can be configured to automatically generate numeric keys.

Optional: Enter the **Parent Eq** (Parent Equipment). This is the equipment number containing the current equipment record, or the next piece of equipment **UP** in the hierarchy.

**Tech Tip:** When first entering equipment, it is helpful to build the hierarchy from the top down. The **Parent Eq** is blank for equipment in the first level. The second sub component will have the first level equipment number as its **Parent Eq**, the third will have the second, and so on. All costs related to the equipment, will roll up the hierarchy.


The default **Status** is *In-Service*. Select a different status from the drop down. Create your own Equipment Status codes from the *Equipment Administration Menu*.

**Zone** - Use the Options icon  to select the Zone for this equipment. The system assigns the user's primary zone as the default. Note: Zones are only available in the Pro version

Enter a **Keyword**. Click  and select Lookup to display a selection list of available keywords, or simply double-click the field for the lookup.


Optional: Assign an equipment **Rating** based on a scale of 1-10, with 10 being the most important. This rating is used in work order scheduling, and to help prioritize work. Equipment ratings can be modified from the *Maintenance Administration Menu*.

Enter a **Description** for the equipment, which is not required but highly recommended.

Optional: Enter a **Cost Center** either from the Options icon  or by double-clicking on the field

Optional: The **Location** of the equipment can only be selected using the Lookup button. Locations need to be created first before using them here.

Although much more information can be provided, this is all that is required for a quick start.

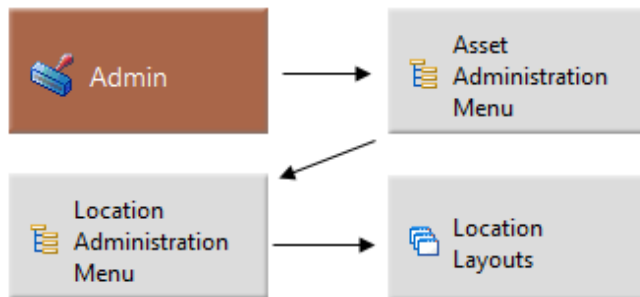
Click **Save**  at the top of the window when finished.

EQUIPMENT SETUP IS COMPLETE.

## Creating Location Layouts

Note: Location layouts and hierarchies are only available in the Pro version

Location layouts are used to label the different levels of a location hierarchy, such as building, floor and room. The default system labels are **Level 1**, **Level 2**, **Level 3**, **Level 4** and **Level 5**. However, these can be changed, and additional layouts can be added. Also, layouts can go beyond five levels to as many as required.



Click on the **Admin Menu**  
 Click the **Asset Administration Menu**  
 Click the **Location Administration Menu**  
 Click the **Location Layouts** menu option.

Select and edit the STANDARD layout to match your facility, or add your own layout.

Location Layout

Lookup Main Sites

Label	Sorting Order
Grounds	1
Building	2
Floor	3
Wing	4
Room	5
	6

To create a new layout, type a new name for your Layout in the **Location Layout** field and press Enter. Then, enter a description for your layout. In the **Layout Labels**, enter the labels you want to display when entering in locations using this layout.

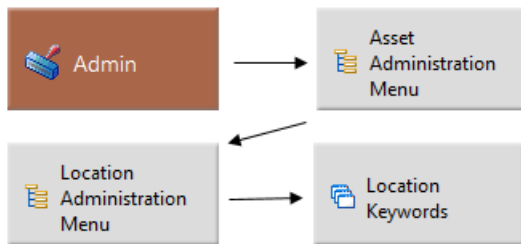


Click **Save** at the top of the window when finished.

**Note:** To use a Location Layout, you must assign the layouts to each site that requires it.

**Note:** If there are multiple layout types, the system will provide an additional filter option to select the desired layout type for location based lookups.

## Creating Location Keywords



Click the **Admin Menu**  
Click the **Asset Administration Menu**  
Click the **Location Administration Menu**  
Click the **Location Keywords** menu option.

All locations must have a Keyword, so create at least one keyword.

ID	Description
ROOM	Room

Titles
Width
Length
Carpet
Windows
Fire Bottles
Exits
Capacity

Like equipment keywords, location keywords categorize similar locations.

Examples of good location keywords:

Classroom	Board Room
Restroom	Shop
Grounds	Production Floor
Office	Dock

Enter in the keyword **ID** and then its description.

In the **Titles** table enter in common attribute titles you want to track for this type of location. These are similar to equipment keyword specification titles. Some examples: **Floor Covering, Wall Covering, Length, or Width.**

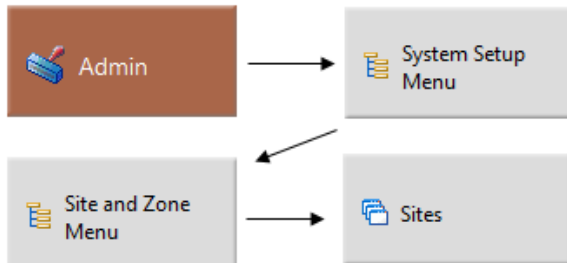


Click **Save** at the top of the window when finished.

## Creating Sites and Zones

A site is an entity that is physically distant from other parts of the company. A zone is a smaller physical entity within the site.

Note: zones are only available in the Pro version



Click the **Admin Menu**  
Click the **System Setup Menu**  
Click the **Site and Zone Menu**  
Click the **Sites** button

Id	Description
01	Manufacturing
02	Operations
03	Misc.(Maintenance)
04	Facilities

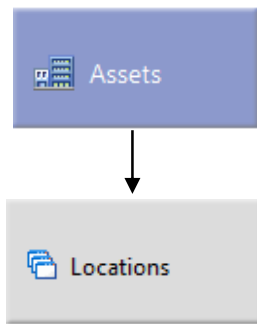
Fill in all the required fields.

Zones can easily be added from the sites screen by entering the zone ID and description.




Click **Save** at the top of the window when finished. Exit MAPCON and reenter in order to see your changes.

## Creating Locations




Click the **Asset Menu**  
Click the **Locations** menu option.

The first thing to decide when entering a new location is what **Layout** you want to use. The layout you choose will potentially change the labels across the screen to something more related to the location structure you will create, such as Building, Floor and Room. Note: Location layouts and hierarchies are only available in the Pro version

Layout	BUILDING	FLOOR	WING	ROOM
BUILDING				


  


Lookup	Main	Safety Procs	Job Steps	Bill Materials	Specs	PM Procs	Equipment	Attachments	Costs
Sort By	Building Layout			Site/Zone	Main - Manufacturing				
	<ul style="list-style-type: none"> <li>Large Layout</li> <li>Standard Layout</li> <li>Building Layout</li> <li>&lt;None&gt;</li> </ul>								

Select the desired layout to start creating locations. The available layout choices are based on the layouts created for each site a user has access to.

Location hierarchies must be created from the top (Parent) down. In this example, select the Building Layout for the **Layout Type** and enter BUILDING\_A for the Building, which is the top level for this layout. It is best to use short descriptions of the actual physical locations if possible.


Layout	BUILDING	FLOOR	WING	ROOM
BUILDING	BUILDING_A 			

**Zone** - Use the Options icon  to select the Zone for this location. The system will assign the user's primary zone as a default. Note: Zones are only available in the Pro version



Enter a **Keyword**. Use the Options icon  and select Lookup to display a list of available keywords, or simply double-click the keyword field to open the lookup.

Optional: Give the location a **Rating** based on a scale of 1-10, with 10 being the most important.

Enter a **Description** of the location, which is not required but highly recommended.

Optional: Enter a **Cost Center** either from the Options icon  or by double clicking on the field

Although much more information can be provided, this is all that is required for a quick start.

Click **Save**  then click **Home**  when finished. Now, let's create the next level:



Layout      BUILDING      FLOOR      WING      ROOM

BUILDING                                  

Lookup Main Safety Procs Job Steps Bill Materials Specs PM Procs Equipment Attachments Costs Purch

Sort By Building Layout           Site/Zone Main - Facilities     

BUILDING ▲	FLOOR	WING	ROOM
BUILDING_A			
TRLSCHOOL	OWML-FLEM		

**To create the next Level (FLOOR)**  
**First:** Double-click and load the parent. In our example, double-click and load BUILDING\_A.

**To create the next Level (FLOOR)**  
**Second:** Click the button.

Layout      BUILDING      FLOOR      WING      ROOM

BUILDING      BUILDING\_A                           

After entering the floor, complete the location record by entering the description, keyword, etc. When

**To create the next Level (FLOOR)**  
**Third:** Enter the second level designation. In this example, enter 1 for the FLOOR.

finished, Click **Save** then click **Home** . Each time a level is added, a new location record is created.

Layout      BUILDING      FLOOR      WING      ROOM

BUILDING      BUILDING\_A           1           

Lookup Main Safety Procs Job S

Sort By Building Layout

BUILDING ▲	FLOOR	WING	ROOM
BUILDING_A			
BUILDING_A	1		

**To create the next Level (WING)**  
**First:** Double-click and load the parent.

**To create the next Level (WING)**  
**Second:** Click the button.  
**Third:** Enter the third level designation. In this example, enter WEST for the WING.

After entering the floor, complete the location record by entering the description, keyword, etc. When finished, Click

**Save** then click **Home** .

Layout      BUILDING      FLOOR      WING      ROOM

BUILDING      BUILDING\_A           1                

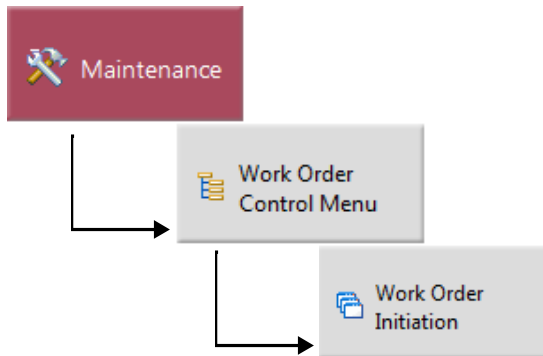
**Continue the next step and add a Room to your location.**

You have now created a four level location hierarchy, **BUILDING\_A – 1 – West – Room**. Having multiple levels for your physical locations provides a method of charging work to the building as a whole, the first floor, the west wing, or to a specific room. Like the equipment hierarchy, costs charged at the bottom will “roll up” to the top.

LOCATION SETUP IS COMPLETE.

## PROCESS A WORK ORDER

### Initiate a Work Order



Click the **Maintenance Menu**  
Click the **Work Order Control Menu**  
Click the **Work Order Initiation** menu option.

Only the red, required fields must be entered before saving a work order.

Click on the **Main** tab to generate the next available **WO** number, indicated by “**NEWKEY**” displayed in the field. The actual work order number is displayed after the record is saved.

WO  Type  Status  Priority

Lookup Main Other Information Attachments

Submitted By  Phone  Date Submitted

Equipment

**Equipment Hierarchy**

Zone

Location

**Work / Problem Description**

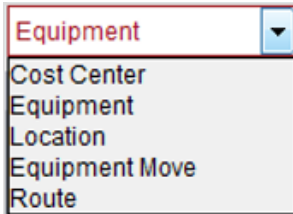
Approval Date

Change **Type** from **Repair** to another type by using the drop down selection box. The Status will start as **Initiated** and cannot be changed. The status is controlled programmatically: The potential status codes are: Planned (requires planned labor), Scheduled (requires a date scheduled), On Hold (requires the Advanced Inventory Module), Completed, or Canceled.

**Note:** You can create your own work order types from *Maintenance Administration*.

Select the **Priority**. Typically, Lower numbers have a higher priority than higher numbers. You can create your own priority codes from *Maintenance Administration*. Associate the number of days a work order can stay unfinished for each priority. Assigning the priority will change the **date required** for work order completion.

**Note:** The user's name will appear in the **Submitted By** field. The **Date Submitted** will default to today's date as the starting date of the work order. These can be changed if needed.



Next, select the type of asset to for your work order.

Typically, **Routes** are generated by the PM system but a route work order can be created manually.

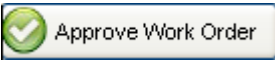
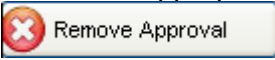
Note: Routes are only available in the Advanced Maintenance module.

Use the **Equipment Move** option to move equipment out of service and remove it from the equipment hierarchy, and replace it with another piece of equipment.



Enter an **Equipment #** in the required red field next to the drop down. Or, double-click the field for a Lookup of available equipment. The system will display the appropriate lookup for the type of asset selected: A location lookup for locations, a cost center lookup for cost centers, etc.

**Notice:** When an equipment or location value is entered, the equipment hierarchy or the location hierarchy is displayed.

Enter the **Work / Problem Description** describing the nature of the problem.

To approve the work order, click  and the system will enter the user's name and the current date into the appropriate fields. Once approved, the user that approved the work order can click  to remove their approval. The user's group or user profile determines whether or not they can approve a work order. If a user does not have the authority to approve work orders, then these buttons are not displayed.

All other information is optional. This is all that is needed for a quick start to create a work order.

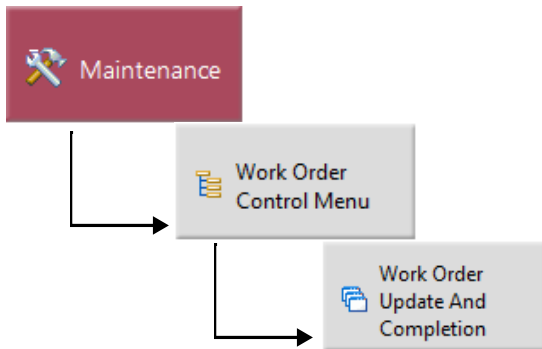
Click  **Save** at the top of the window to create this work order. The work order number will appear in the bottom right hand corner .

Additional options are available to automatically print the work order when its first created. Set these options on the *Maintenance Configuration* window.



Click **Close** on the top menu bar to close the window.

## Complete a Work Order



Click the **Maintenance Menu**  
 Click the **Work Order Control Menu**  
 Click the **Work Order Update and Completion** menu option.

Enter the **WO #** created from the previous page or use the lookup to select a work order by double-clicking on it.

WO #  Type  Status

Equipment  Description

Equipment Location   Work Order Was Printed

Date Planned  Planned By  Date Required

Completion Date  Completed By  Project

Create Follow-Up Work Order(s)

Failure Code	Failure Description	Cause Code	Cause Description	Action Code	Action Description

Comments

Submitted  Out of Service  Time  Estimated Downtime  Hrs

by  Return to Service  Time  Actual Downtime  Hrs

To complete a work order, simply enter the **Completion Date** manually, or click  to use the calendar popup, and select the current date.

Depending on the Maintenance Configuration settings, the system can automatically set the **Completed By** field to the user's name. Or, the user can double-click the field to add a different name, or click  to add their own.



**Tech Tip:** Dates can be entered in MAPCON using only 6 digits; the slashes are not required. For example: typing 060312 will change into 06/03/12 automatically after pressing [Enter]. If you are using a different or an international date format, this feature is still available. Simply enter the numbers in the order of date format, such as DDMMYY.

**Note:** MAPCON considers a work order completed once it has a completion date. After saving the work order, the status will change to **Finished**.

In the **Comments** field, fill in what was done to correct this situation. All other information is optional.

**Tech Tip:** To track downtime, use the **Out of Service** and **Return to Service** date and time fields. MAPCON will calculate the difference between these values and automatically determine the **Actual Downtime**.



Click **Save Record** at the top of the window to update and complete the work order.

The system will prompt to verify the completion process. If you click yes, the system will ask if the work order should be sent to history. Once a work order is in history, it cannot be changed. Whether or not these prompts are displayed can be configured from the *Maintenance Configuration* window.



Click **Close** on the top menu bar to close the window.

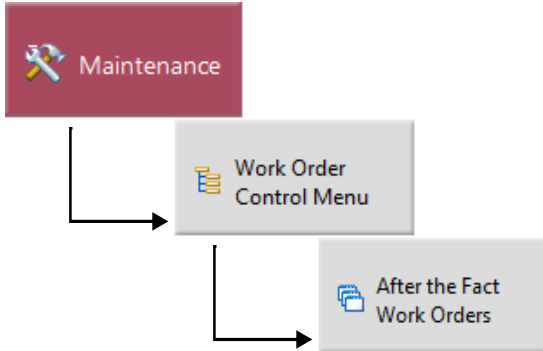
**WORK ORDER PROCESS IS COMPLETE.**

## After the Fact (One Step) Work Orders

Note: After the Fact Work Orders are available in the Advanced Maintenance Module

Use an After the Fact Work Order to track work that has already been completed but needs to be recorded for work, labor and material history. An after the fact work order is unique in two ways:

- Only one screen is used to do everything. You can create and close a new work order in a few clicks and keystrokes in seconds!
- The Completion Date is a red, required field that must be entered before the work order can be saved.



Click the **Maintenance Menu**  
 Click the **Work Order Control Menu**  
 Click the **After the Fact Work Orders** menu option.

Only the red, required fields must be entered before saving a work order.

Click on any tab or into any field to generate the next available **WO#**, indicated by “**NEWKEY**” displayed in the field. The actual work order number is displayed when saved.

WO #  Type  Status  Zone

Main | **Timecards** | Material | Meters/Gauges | Charge Codes | Costs

Date Completed  By

Equipment

Location

**Equipment Hierarchy**

- 102 PRODUCTION -LINE 2
- 102-300 REFRIGERATION
- 102-300-1 MOTOR FOP
- 102-300-1B

Out of Service  Time

Return to Service  Time  Actual Downtime  Hours

Failure  Action

**Problem**

Bad Leak from a cracked pipe.

**Comments**

Replaced pipe.

Defaults to **Completed** Status.

Automatically adds **Completion Date** (current date) and **Completed By** (current user).

Enter the user that completed the work, or click for a list of employee names.


Select the asset type (Equipment, Location, etc) then enter the equipment #, Location, etc. Or double-click the field for a lookup.

Enter **Problem Description** to describe the problem.

Enter **Comments** to describe what was done to correct the situation.

All other information is optional.



Click  at the top of the window to initiate and complete the work order.

YOUR WORK ORDER HAS NOW BEEN INITIATED AND  
COMPLETED ALL IN ONE STEP FROM ONE SCREEN!



## PREVENTIVE MAINTENANCE

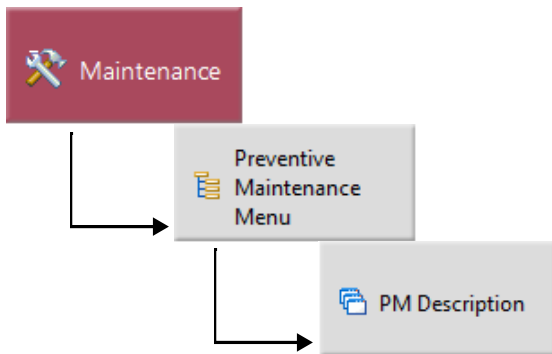
There are three steps involved in generating preventive maintenance work orders:

1. Create a **PM Description** that describes the work to perform, including any required labor and materials.
2. Add assets (Equipment, Locations, Cost Centers) to the PM Description and create **PM Frequencies** to depict how often the task is performed for that asset.
3. **Generate** the PM Work Orders.

Many facilities will generate their PM work orders on a Friday for the next week to plan ahead and ensure all parts are available and to schedule the workers.

**Note:** The terms PM Description and PM Procedure will be used interchangeably throughout the system and this documentation.

### 1. Setup PM Descriptions



Click the **Maintenance Menu**  
Click the **Preventive Maintenance Menu**.  
Click the **PM Description** menu option.

To create a new PM Procedure, click in the **Title** field to generate the next available **PM Procedure #**, indicated by “**NEWKEY**” displayed in the field. The actual PM Procedure number is displayed when saved.

PM Desc #  Title

Lookup Main Equipment/Locations/Cost Centers/Routes Labor Materials Cycles Attachments Revisions

Work Order Status  Type  Priority  Status

Allow Duplicate Work Orders  Generate Work Orders On the Basis Of Date Last Done Advance # Days

**Task**

INSPECT AND MAKE ANY PREPARATIONS NECESSARY TO HAVE ALL EQUIPMENT MEET OSHA REGULATIONS. SEE CURRENT OSHA SPEC SHEETS POSTED OR CONTACT TEAM LEADER

Approve PM  Next Review  Revision

Enter a brief description for the nature of the work in the **Title** field. Many facilities prefer to start with how often the PM is performed, such as Daily Inspection, Monthly Lubrication, or Annual Overhaul.

## The Basics

Select the **Work Order Status**. The work order will have this status when generated. Note: status is only available in Pro

- Basic PMs will have the **Initiated** status.
- The **Planned** or **Scheduled** status requires at least one Crew/Craft/Shift assigned on the **Labor** tab with at least one estimated **Worker** for one **Hour** of estimated work.
- The **Scheduled** status will set the work order's date scheduled to the generation date.

Select the work order **Type**. Edit the standard work order types or create your own from *Maintenance Administration*. A work order type must have the *PM Work Order* designation to appear here.

Select the **Priority**. Priority codes are used to determine the overall work order rating and to assist in scheduling.

The PM **Status** will either be *Approved* or *Not Approved*. Only approved PM Procedures are generated. Once approved, any change to the PM Description requires another approval and a reason for the change. The system retains each revision made on the PM Description: the user that made the revision, when they made it, and why.

Check the box to **Allow Duplicate Work Orders** if meter or gauge readings should generate more than one PM work order each time a reading is entered that triggers the PM. For example, if PMs are not generated until Friday, and a user enters a meter reading on Tuesday that triggers the PM, and another user enters a higher reading on Thursday, then two PM work orders will generate, one for each event that triggered it. Note: option available in Pro only

**Tech Tip:** Elapsed Time and Meter frequencies can be combined, where one or the other will trigger the next PM work order. For example: change the oil every 6 months or 3000 miles. For this scenario, do not check this box. Note: option available in Pro only

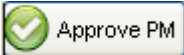
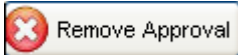
Check the box **Generate Orders on the Basis of Date Last Done** if a completion date on the PM work order is required before generating the next PM work order. If **not** checked (called **Date Last Due**), the next PM work order will generate regardless if the previous work order was completed.

**Tech Tip:** To keep a balanced PM schedule, such as generating some monthly PMs early in the month and others later in the month, do not check this box.

Enter the **Advance # of Days** if more time is required for ordering materials and ensuring they arrive on time. Also, use this option to generate PMs early for fill work. Setting this field will **not** adjust the work order's **Required Date**. For example, the Required Date is set to the frequency's due date when the work order is generated, or to the generation date. If the worker has 7 days to complete the PM, then enter 7 advanced days. The PM work order will be generated 7 days in advance of its due date but the required date will remain the same. Note: Advanced Days is only available in the Pro version

Enter a description of the work to be performed in the **Task** field. This text will appear in the work order's Work / Problem Description area. Some organizations list each PM task here. However, if planning or scheduling labor, use the **Job Steps** on the **Labor** tab for specific tasks performed by different trades. In this case, only a brief task overview should be entered here.

The **Revision** field is read-only and tracks the number of approved changes to a PM procedure. You can review the history of changes by clicking on the **Revisions** tab.

Click  to approve the PM Description. Click  to remove your approval. If the user's profile or group profile does not have the authorization to approve PM Procedures, then these buttons will not be displayed Note: option available in Pro only

There is a lot more information that can be added to a PM procedure:

- The **Labor** tab defines the Crew, Craft and Shift labor, detailing the job steps each craft will perform. The number of workers needed and for how many hours, although optional for initiated work orders, is necessary for planning and scheduling.
- The **Materials** tab defines the required materials. With the Advanced Inventory Module, the system will create planned Issue ticket for the work order when its generated.
- **Cycles** are a handy way to eliminate extra work order paper waste. For example, if an Annual PM includes the same steps as a Quarterly, then only generate a quarterly PM three times and don't generate the quarterly when the annual is due. The cycles using the PM Description are displayed on the **Cycles** tab. Note: PM Cycles are only available in the Pro version
- **Sites** will allow this PM description to be used for more than one Site for more consistent procedural instructions between the Sites. If only one site is available, then the site tab is not displayed.

- **Attachments** are documents associated with the procedure, such as images of the work area/equipment, MSDS form sheets, calibration forms, etc. Assign attachments on the **Attachments** tab.

## Adding Assets to the PM

PM Desc #  Title

**Equipment/Locations/Cost Centers/Routes For PM**

Type	Eqp/Loc/Rt/CC	Description
Equipment	370-T	1/2 TON CHEVY PKUP -TRANSPORTATIO
Equipment	550-T	2005 CHEVY SUBURBAN -TRANSPORTA
Equipment	CONV-1-M	MAIN MOTER FOR CONV-1

▼

Cost Center

Equipment

Location

Route

At least one entity must be added to the PM Description for it to generate.

Select the **Type** of asset that requires the PM Definition. Manually enter the asset or double click in the **Eqp/Loc/Rt/CC** column for a lookup of equipment, locations, routes, or cost centers. The system will show the valid lookup based on the selected **Type**.

On the left hand side of the window, click **Frequencies** (shown below).

## 2. Setup PM Frequencies

PM Desc # PM0003 Title OIL CHANGE (TRANSPORTATION)

Equipment/Locations/Cost Centers/Routes Labor Materials Cycles Attachments Revisions

Type Equipment Eqp/Loc/Rt/CC 102

Serial # 654867HV Model #

Desc PRODUCTION -LINE 2 MAIN PLANT

Elapsed Time/Meters 52 Week Gauges

Freq None

Choose the frequency first. Select None if the PM is meter based only.

If equipment has meters, then they will be displayed here to assign PM intervals

Remember: Time based and meter based PMs can be combined on one frequency.

PM Desc # PM0003 Title OIL CHANGE (TRANSPORTATION)

Equipment/Locations/Cost Centers/Routes Labor Materials Cycles Attachments Revisions

Type Equipment Eqp/Loc/Rt/CC CONV-1-M

Serial # Model #

Desc MAIN MOTER FOR CONV-1

Elapsed Time/Meters 52 Week Gauges

Freq Monthly Mult 1

Day

Lst Due 03/13/2010

Lst Done 12/16/2009

Last Gen 10/19/2010

Adv Days 5

Generate Wos On Basis of Date Last Done

Allow Duplicate Work Orders

Uses Default Labor

Meters					
M#	Units	Curr Total	LastPMTot	Interval	
1	HOURS	2550.00	2550.00	2600.00	


Frequency types include:


**Elapsed Time** - Daily, Weekly, Monthly, Quarterly, Semi-Annually, Annually

**Meters** - PMs triggered by a meter reading after a certain interval

**52 Week Schedule** - irregular frequencies, such as Monthly but not in the winter

**Gauges** - PMs triggered by a Gauge reading outside of a set tolerance range

Click  Extended Definition for additional generation information for an asset. Add asset specific **Safety Procedures, Attachments** and **Labor** requirements.

When finished, click  at the top of the window.

## Elapsed Time

Elapsed Time/Meters **52 Week** **Gauges**

Freq  Mult

Day

Lst Due

Lst Done

Last Gen

Adv Days

Select the **Frequency** first, then the other fields will appear.

The **Multiplier** is used to set a longer delay between generations. For example, to generate a PM every 3 Months, enter **3** for the multiplier. For every 6 weeks, set the frequency to Weekly and enter 6 for the multiplier.

**Last Due** – Date Last Due. Use this date to set the next generation date. The PM system will go forward from this date the amount of time set in the Frequency and the Multiplier.

- Ex. 1: to have a Monthly PM generate on 07/07/12, set the Last Due date to 06/07/12.
- Ex. 2: to have a Quarterly PM generate on 12/01/12, set the Last Due date to 09/01/12.

This is read-only if the checkbox for Generate WOs on Basis of Date Last Done is **checked**. In that case, use the Last Done date field to trigger the PM.

**Last Done** – Date Last Done. Use this date to set the next generation date. The PM system will go forward from this date the amount of time set in the Frequency and the Multiplier.

- Ex 1: to have a Monthly PM generate on 07/07/12, set the Last Done date to 06/07/12.
- Ex. 2: to have a Quarterly PM generate on 12/01/12, set the Last Done date to 09/01/12.

This field is updated when the generated work order is finished. The **Completion Date** on the Work Order Update and Completion window indicates when the PM was finished. That completion date for the PM work order appears here. The system is then ready to start calculating when the next work order will generate.

**Caution:** If the work order is left open and is never completed, then the PM will not generate again. To avoid this, use Date Last Due.

This field is read-only if the checkbox for Generate WOs On Basis of Date Last Done is **not checked**. In that case, use the Last Due date field to trigger the PM.

Select the **Day** of the Month, Week, etc. when the PM should generate. For example, select **1** to always generate on the first day of the month.

**Adv Days** – Advance # of Days. This is set on the Main page of the PM Description, but can be over-written here. Note: Advanced Days is only available in the Pro version

## Meters

Meters				
M#	Units	Curr Total	LastPMTot	Interval
1	HOURS	2550.00	2550.00	2600.00

Meters only appear if the equipment has meters assigned to it. Then, PM work orders can be generated based on the meter reading(s).

**M#** The meter name as defined on the equipment (i.e.: 1, 2, odometer, etc).

**Units** The unit of measurement (Hours, Cycles, Miles, etc.)

**Curr Total** The Current Total reading on the meter.

**LastPMTot** Last PM Total. The reading on the meter from the last PM.

**Interval** This is the number of units that must pass before the next PM is generated. For example, every 3000 Miles for an oil change, or every 500 Hours for a filter change.

## 52 Week Schedule

Elapsed Time/Meters
52 Week
Gauges

52 Week Schedule
Delete

Week	Date	Generate
1	01/01/2010	<input type="checkbox"/>
2	01/08/2010	<input checked="" type="checkbox"/>
3	01/15/2010	<input type="checkbox"/>
4	01/22/2010	<input type="checkbox"/>
5	01/29/2010	<input checked="" type="checkbox"/>
6	02/05/2010	<input type="checkbox"/>
7	02/12/2010	<input type="checkbox"/>

Occurs

Uses Default Labor

Day

Advance Days

Last Week

Next Week

Last Due

Last Gen

Last Done

Irregular frequencies can be set using a calendar showing the 52 weeks of the year. For instance, Snow and Ice Removal is a regular task in the winter but not in the summer months.

Click the **52 Week** tab, then click the **Generate** column to indicate which weeks of the year the PM will generate.

For a faster setup, use the **Occurs** field to quickly set every 2 weeks or every 3 weeks, and then uncheck those weeks that do not apply.

Set **Advance Days** to have the PM generated early. This is set on the Main page of the PM Description, but can be over-written here.

Set the **Day** of the week to balance the schedule, preventing all weeklies from being due on the same day.

## Gauges

Note: Meters and Gauges are only available in the Pro version

G#	Units	Last Reading	Lower Limit	Upper Limit
1	PASSES	73.00		

If the equipment has one or more gauges assigned to it, then a PM work order can be generated based on the gauge reading(s).

Gauge readings are based on a tolerance range, such as the acceptable lower and upper limits of a hot water pipe's temperature. When the gauge reading is entered outside of its preset limits, the system will prompt the user to immediately generate a PM work order. If one is not immediately generated, it will be the next time PMs are generated.

Click the **Gauges** tab.

**G#** The gauge name as defined on the equipment (i.e.: 1, 2, pipe gauge, etc).

**Units** The unit of measurement (PSI, Temperature, voltage).

**Last Reading** The last time this gauge was updated.

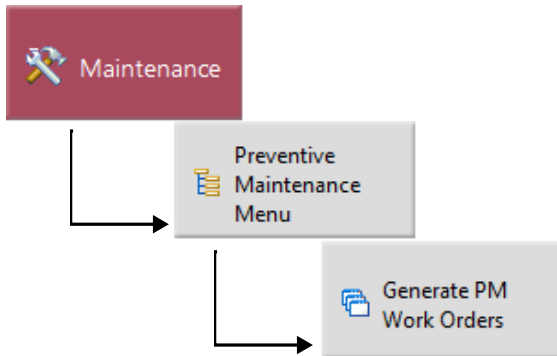
**Lower Limit** Enter the lowest value the gauge reading can be and be within tolerance.

**Upper Limit** Enter the highest value the gauge reading can be and be within tolerance.

**Allow Duplicate Work Orders** Generates a PM work order for each event when a gauge reading was entered outside of the tolerance range.



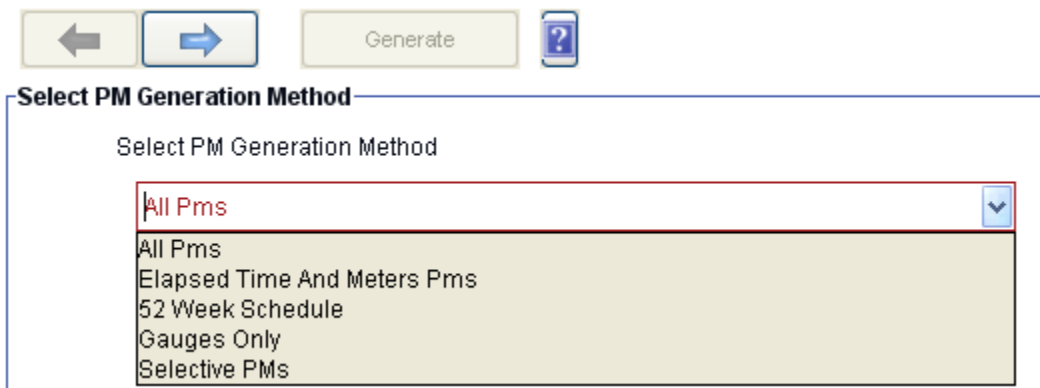
## 3. Generate PM Work Orders



PM Work Orders can be generated after the PM Descriptions have been created and their Frequencies defined.

Click the **Maintenance** menu  
Click the **Preventive Maintenance Menu**  
Click the **Generate PM Work Orders** menu option.

### Select View & Order



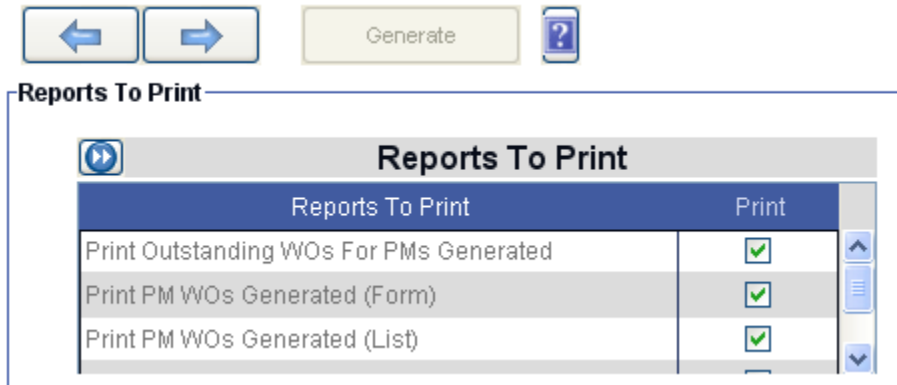
Select the type of frequencies that should be generated. Select **All PMs** to generate for all frequencies, or choose individual frequencies.

The **Selective PMs** option allows you to choose a combination of a specific Equipment or Location or Cost Center, and a specific PM attached to it.

**Tech Tip:** If machinery is already off-line, choose the Selective PMs option to generate all of the PMs due in the near future to help eliminate down time.

Click  to advance to the next step.

## Select Reports to Print




The **Print** column indicates which reports will print after generation. All reports are turned on by default. Clicking on the checkbox will unselect a specific report.

Click  to advance to the next step.

## Select for Site and Zone



Select the Zone requiring PM Generation. Or, check the site box and select the Site requiring PM Generation.

Click the Options icon  then choose Lookup for a list of valid zones or sites. Or simply double-click the field.

Click  to advance to the next step.

## Starting Date

← → Generate ?

**Starting Date**

◀Nov ▶ 1 , ◀2010▶						
S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

11/01/2010

◀Feb ▶ 8 , ◀2012▶						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29			

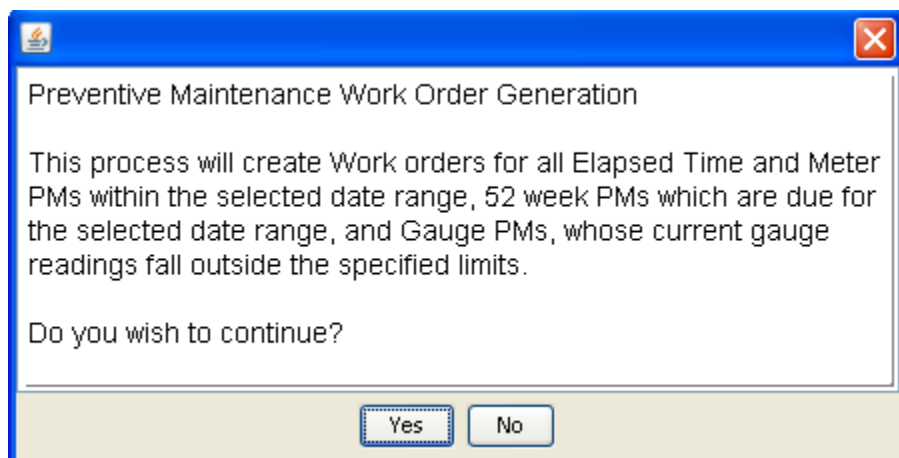
02/08/2012

To prevent re-generating PM work orders, the **Starting Date** is a read-only field (left hand side). After generation, the **Ending Date** (right hand side) plus one day will become the next Starting Date. For example, if the Ending Date is 06/15/12, the next Starting Date will be 06/16/12.

**Note:** The starting dates for each zone can be modified from the *Maintenance Configuration* window.

The **Ending Date** (right hand side) is how far out in advance the PM system should look for Frequencies that are due. Most users will generate on a Friday for all of the PMs that are due for the next week. In this example, the Starting Date would be on a Saturday, and the Ending Date would be on a Friday.

Click  to advance to the next step. Click **Yes** when the system displays:



## Ready to Process



**Ready To Process**


You are now ready to execute the procedure. Click on the Generate button to execute the process.

The process will run using the following information that you have entered:

---

**Selected Category Values**


Reports To Print	Site Zone	Starting Date	Ending Date
Print Outstanding WOs For PMs Generated	EVAL - 01	11/01/2010	02/08/2012
Print PM WOs Generated (Form)			
Print PM WOs Generated (List)			
Print PM WOs Not Generated (Duplicates)			

The final step is to review your selections. When ready, click  to create PM Work orders.

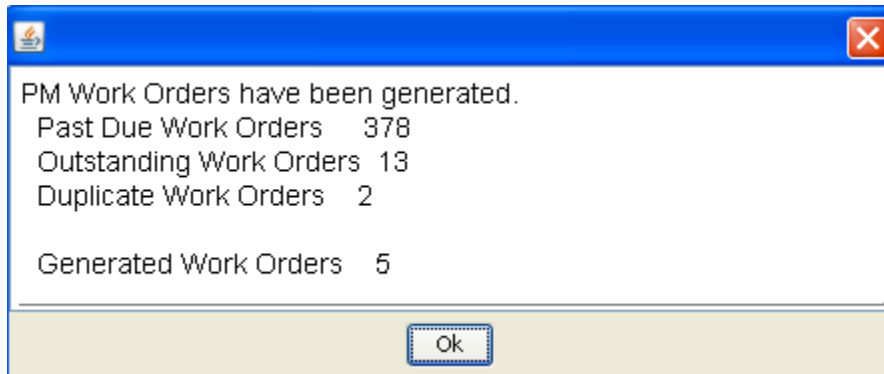
The generation process will always double check to see if there are any Past Due Work Orders. PM Work Orders are past due if they have not been generated and the current date is beyond their due date. This can happen when setting up new PM frequencies, or if PMs have not been generated regularly.

If there are any Past Due orders, the following lookup is displayed:

Generate These Past Due Orders								
...	Eqp/Loc/CC/Rt	Pm Proc...	Pm Type	Due Date	Trigger	Title	Zone	Site
E	000010	PM0059	52	06/11/2007	52 Week	Periodic Power check	01	MAIN


Highlight the desired Past Due PMs to generate (if any), then click the Select icon  to continue.

When the program is finished generating, a message similar to the following will appear:



Click **Ok**.



Click the **Close** icon  to close the window.

View the generated work orders using the one of the Work Order data entry windows.  
Or, review the reports generated by the PM Generation process.

**PM WORK ORDER GENERATION IS NOW COMPLETE!**

## GLOSSARY

Definitions of words as they apply to MAPCON

**Asset** - Equipment, Location or Cost Center.

**Equipment** - can be a machine or a major tool.

**Hierarchy** – An organization of equipment, such as sub-assemblies. Smaller equipment can be part of a larger hierarchy, and allows costs to “roll-up” the hierarchy for more accurate cost tracking of the parent asset. Note: hierarchies are only available in the Pro version  
Note: Equipment and Location Hierarchies are only available in the Pro version.

**Keywords** - A way of organizing and grouping like items together.

**Location** - can be a building or place that provides a particular service or is used for a particular industry. As a ‘place’, it doesn’t even need to be a building – a golf course, school grounds, or parking lot could be locations as well.

**Route** - is a collection of equipment, locations, or cost centers that is organized as a list of *stops*. When a work order is performed against the route, the same maintenance function is performed against each entity (each stop) on the list. Note: Routes are only available in the Pro version  
Note: Routes are only available in the Pro version.

**Cost Center** - is an entity whose primary purpose is to keep track the cost of work done, including material, labor, and direct purchases. Like a route, a cost center contains other entities such as equipment or locations – each equipment or location is assigned a cost center. Some organizations may wish to define cost centers as divisions. For example, Research & Development might be one cost center, the Maintenance Department another cost center. Other organizations may treat the cost center as an account code, where the account code describes the activity taking place. Most facilities already have cost center numbers defined by their internal administration or accounting department.

**Site** – is a way to separate multiple facilities which are related through a parent company. They may be located in different cities, states, or countries.

**Zone** – is a way to separate areas within a Site. They can physical or logical.  
Physical: Each area or department is considered a zone, such as Administration, Maintenance, or Shipping/Receiving. Likewise, each building may be a zone.  
Logical: three similar assembly lines may each have their own zone. For example, a process may start in one area for cutting, continue on to another area for painting, and finish in another area for assembly. This whole process may be considered one zone.  
Note: Zones are only available in the Pro version.

**Work Request** - a process where problems with equipment and facilities were noticed and reported to maintenance workers.

**Work Order** – a process where maintenance tasks are assigned to an asset, and may include planning material and scheduling labor. Preventive maintenance work orders are setup to generate on a repeated basis because the tasks are the same each time. The work order not only organizes current activities, but also provides a history of what was done and how long it took.

## OTHER MAPCON SERVICES

### SUPPORT

Mapcon Technologies, Inc. provides world-class customer service to all of our valuable clients. Your annual Support agreement provides unlimited phone calls, e-mail support, and free upgrades as they are released.

### MAPCON USERS GROUP (MUG)

The Mapcon Users Group meets once a year to share success stories of how they have modified the system to make life better, and show how you can do it too! The annual MUG Conference also offers basic training and other fun activities. Many MAPCON users feel like they become part of our extended family after enjoying the MUG experience. Visit our website at [www.mapcon.com](http://www.mapcon.com) and click the **Users Group** link for more details.

### TRAINING

The key to any successful facility is proper training. We offer three different training options, to fit your needs!

#### **Train at Our Facility**

Training at our HQ in Des Moines, Iowa is a great way to learn CMMS Software! The MAPCON Corporate Training Center has computer terminals for each attendee so they can easily follow and participate in class activity.

#### **On-Site User Training**

MAPCON provides comprehensive and effective end-user CMMS training at your location, customized to fit your needs. On-Site CMMS Software training is usually scheduled for a 2-3 day time period. On-Site User Training has the additional valuable benefit of direct training with your CMMS system and data and focuses directly on your maintenance operation.

#### Train Online

Training on MAPCON's CMMS Software using online classes is the ideal way to save money and time! MAPCON utilizes GoToTraining® for its online classes. GoToTraining allows us to host online classes with up to 25 people so you can do more and travel less.

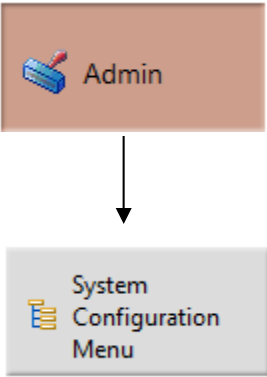
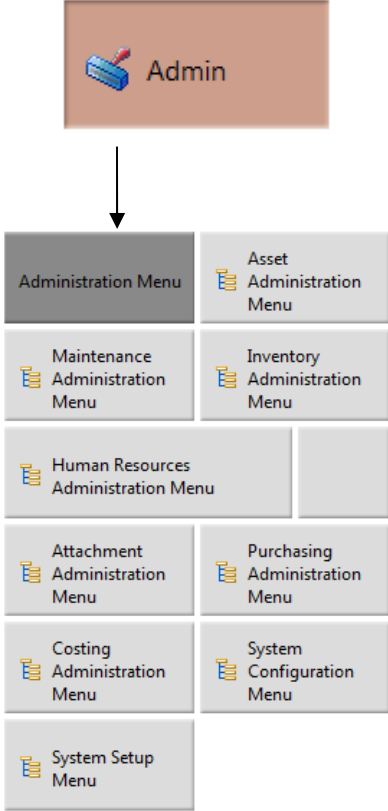
Training schedules vary with demand. For more information on training schedules, see our web site at [www.MAPCON.com](http://www.MAPCON.com), or contact us at 800-223-4791.


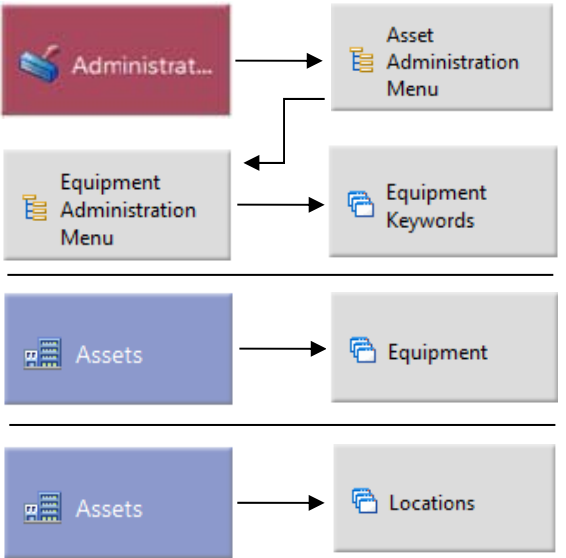
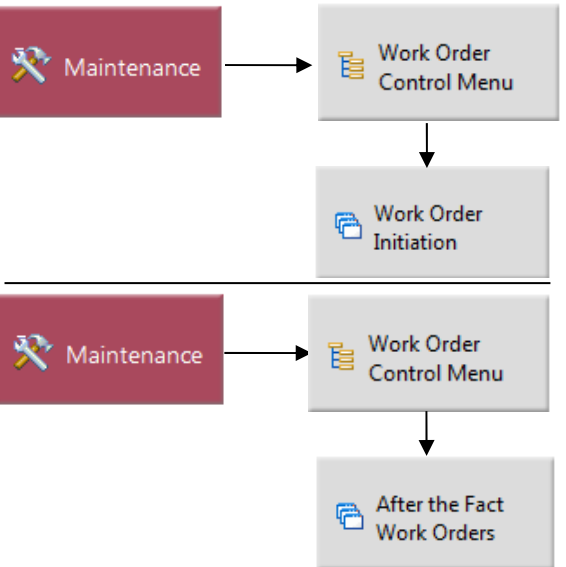
### CUSTOM PROGRAMMING

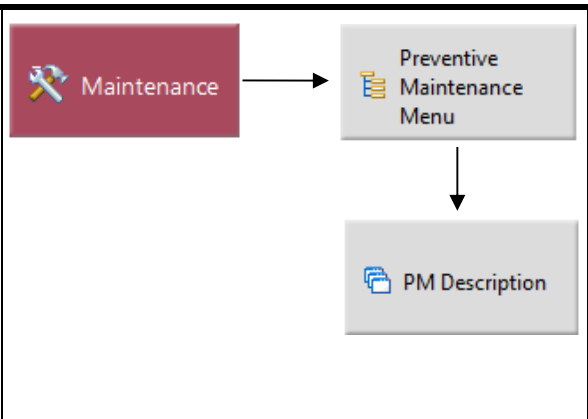
Using our custom programming services, you can integrate MAPCON with any other accounting or purchasing software system, schedule automatic data transfers, or build complex reports. For more details, call 1-800-223-4791.



## Quick Reference

<u>TOPIC</u>	<u>WHERE TO START</u>	<u>SPECIAL NOTES</u>
<p>➤ <b>Software Configuration switches</b> need to be set.</p> <p>Discuss how each MAPCON module will be used and how day-to-day procedures are integrated into MAPCON.</p>		<p>Most Software Switches can be set or changed at any time in the future. However, it is very important that the <b>Cost Accounting</b> switches are set first before starting.</p>
<p><b>Codes and Validations</b> are used throughout the system to provide Lookups, to ensure data integrity, and to provide searching and sorting options.</p> <p>Some validations can be built as you enter data, such as cost centers. However, a thorough review of all validations is highly recommended.</p>		<p>Create Cost Centers to track the cost of Labor, Material, Purchases and Services.</p> <p>Create at least one Craft to start with. Crews and Shifts are optional.</p>

<ul style="list-style-type: none"> <li>➤ Create <b>Employees</b>.</li> </ul>		<p>Create as many employees as needed.</p> <p>Workers from outside the company can be setup to have their time and activities tracked.</p>
<ul style="list-style-type: none"> <li>➤ Create <b>Equipment Keywords</b>.</li> <li>➤ <b>Equipment Numbering and Hierarchical Structure</b> need to be determined before any work orders or PM records can be created.</li> <li>➤ <b>Locations</b> can be developed into a hierarchy by creating one level at a time.</li> </ul>		<p>Create at least one keyword in the system before starting.</p> <p>Equipment Data Entry: Use the Next Level field to indicate which equipment number is the next level UP (parent) in the hierarchy. Build from the top down, so start by creating the primary piece of equipment first.</p>
<ul style="list-style-type: none"> <li>➤ Create <b>Work Orders</b> for Equipment, Locations, Cost Centers, or Routes using user defined types and priorities.</li> <li>➤ <b>After the Fact Work Orders</b> are handy when the job has already been completed, yet you still want to have a history of the labor and the materials used.</li> </ul>		<p>Click on the main tab to generate the next available work order number.</p> <p>Enter all required, red fields before saving the work order.</p> <p>Quickly create work orders with a minimal amount of data and mouse clicks.</p>

<ul style="list-style-type: none"> <li>➤ <b>Preventive maintenance</b> requirements should be identified.</li> <li>➤ Determine how often they occur by creating a <b>Frequency</b>.</li> <li>➤ Then <b>Generate</b> PM work orders. Many facilities generate on Friday for the following week, allowing time to plan labor and materials.</li> </ul>	 <pre> graph LR     A[Maintenance] --&gt; B[Preventive Maintenance Menu]     B --&gt; C[PM Description]     </pre>	<p>Weekly, monthly, and Annual PM records need to be established prior to PM Generation.</p> <p>PM's can be established right from the Equipment, Location and Cost Screens.</p>
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**Easy to use. Powerful software. Priced right.**



**MAPCON**

Mapcon Technologies, Inc.  
8191 Birchwood Ct., Ste A  
Johnston, Iowa 50131

Phone (800) 223-4791  
Fax (515) 331-3373

[www.mapcon.com](http://www.mapcon.com)

[sales@mapcon.com](mailto:sales@mapcon.com)