

MAPCON

MAPCON

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Get Started Using MAPCON

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MAPCON TECHNOLOGIES INCORPORATED

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Thank you for using MAPCON® – *the most productive tool you will ever use!*

This guide is intended to help you get started using either *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, *Lite and Pro as well as 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 them both as just MAPCON.

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

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

The screens and menus used in this guide are from the 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.



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:

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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:

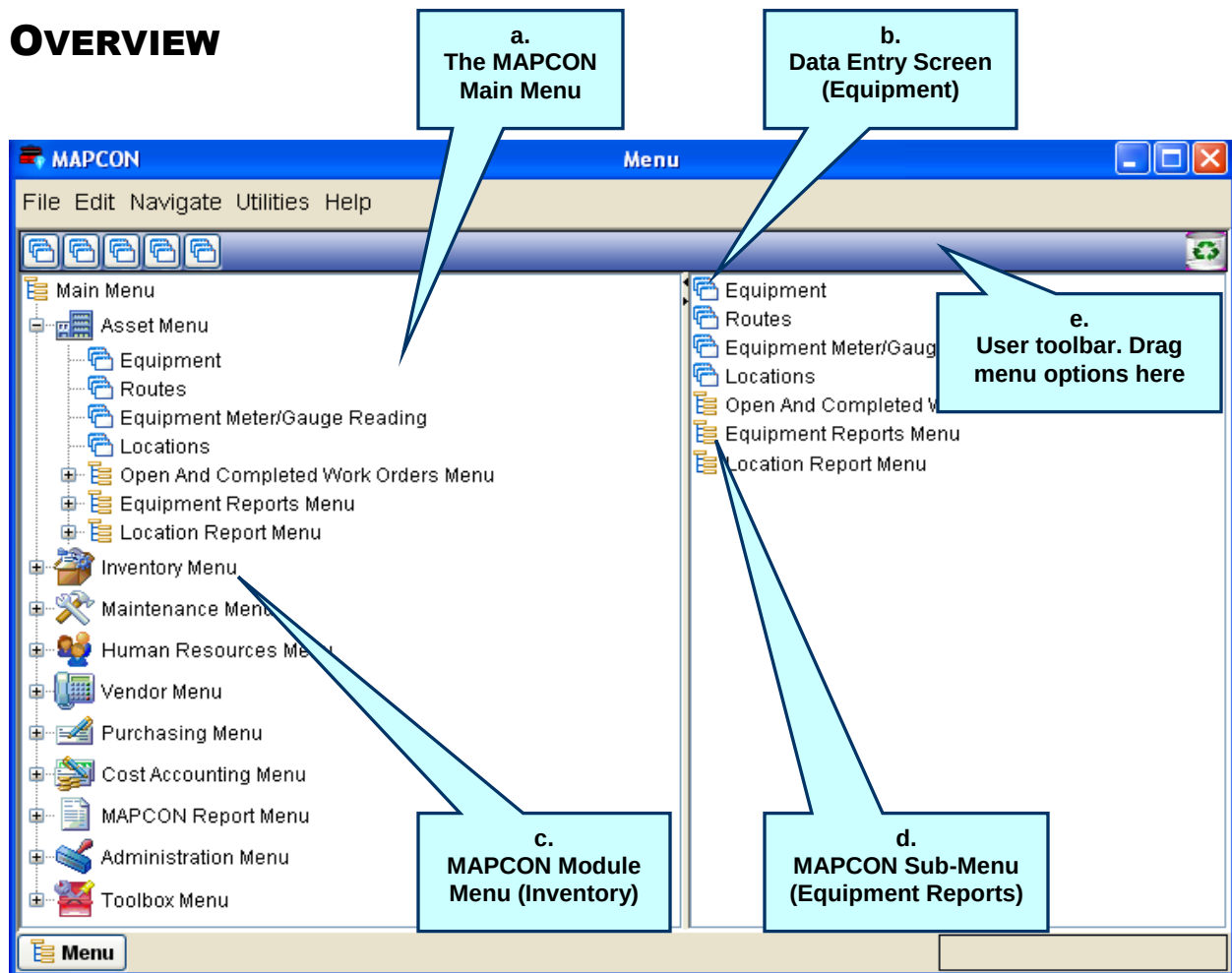
- In each field, press [**F1**] for more detailed information or click the **Help** button at the top of the window.
- Consult the *MAPCON User Manual* regarding any topic.
- Our experienced professionals can help you find what you need. Contact our knowledgeable Support Specialists at **800-223-4791**.

LOGGING INTO MAPCON



Double-click the red toolbox icon. A Login window will appear asking for your User Name and a Password. Enter the **User Name** and the **Password** you setup when downloading MAPCON. Then, Click  to start MAPCON.

OVERVIEW



a. The MAPCON main menu area gives you a file explorer style hierarchical selection of the many options in MAPCON.

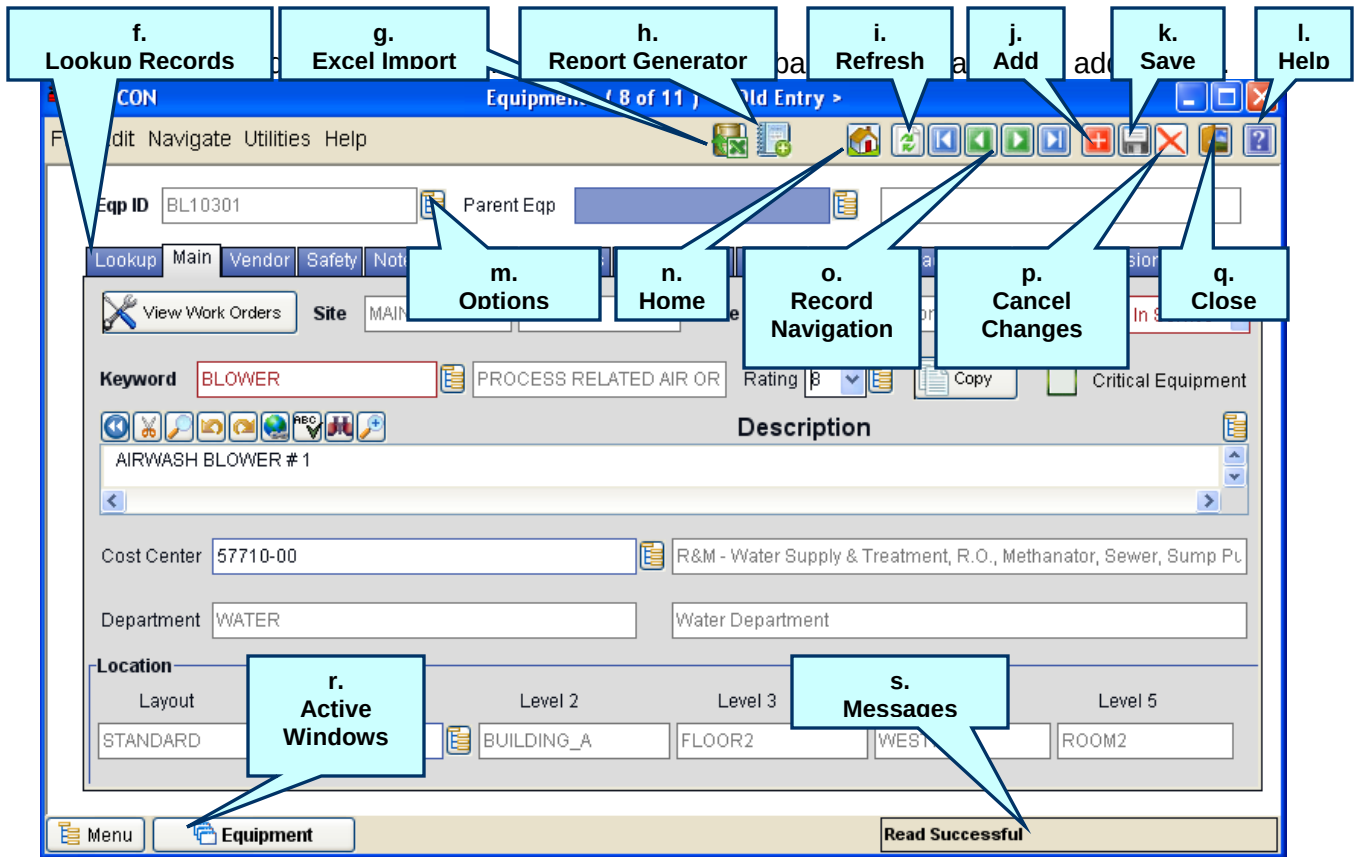
b.  Equipment
MAPCON Windows are accessed with this type of icon. This is an example of the Equipment Data Entry screen.

c.  Inventory Menu
Each main module has its own icon. Clicking the plus sign  to the left of the module will expand the menu to reveal more options for the module.

d.  Equipment Reports Menu
Inside each main module are sub-menus with more categorized options. Clicking the plus sign  to the left of the menu icon  will expand the menu system to reveal the options of this menu.

e. 

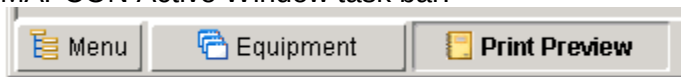
Click and drag menu options here to create your own toolbar. Click and drag 



Controls

- 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.
- Click **Import Excel**  to import data from a Microsoft Excel™ spreadsheet.
- Click **Report Generator**  to start creating a report based on the data entry window.
- Click **Refresh**  to refresh the data in a lookup or on a screen.
- Click **Add**  to create a new record.
- Click **Save**  to save changes to any record.
- Click **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**  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**  to clear a window without saving changes.
- q. Click **Close**  to close the window.
- r. Quickly access the Main Menu or other open windows from the items on the MAPCON Active Window task bar.



- s. Messages display the status of MAPCON operations.



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

a. Column Search

b. Sort Selection

c. Site / Zone selection

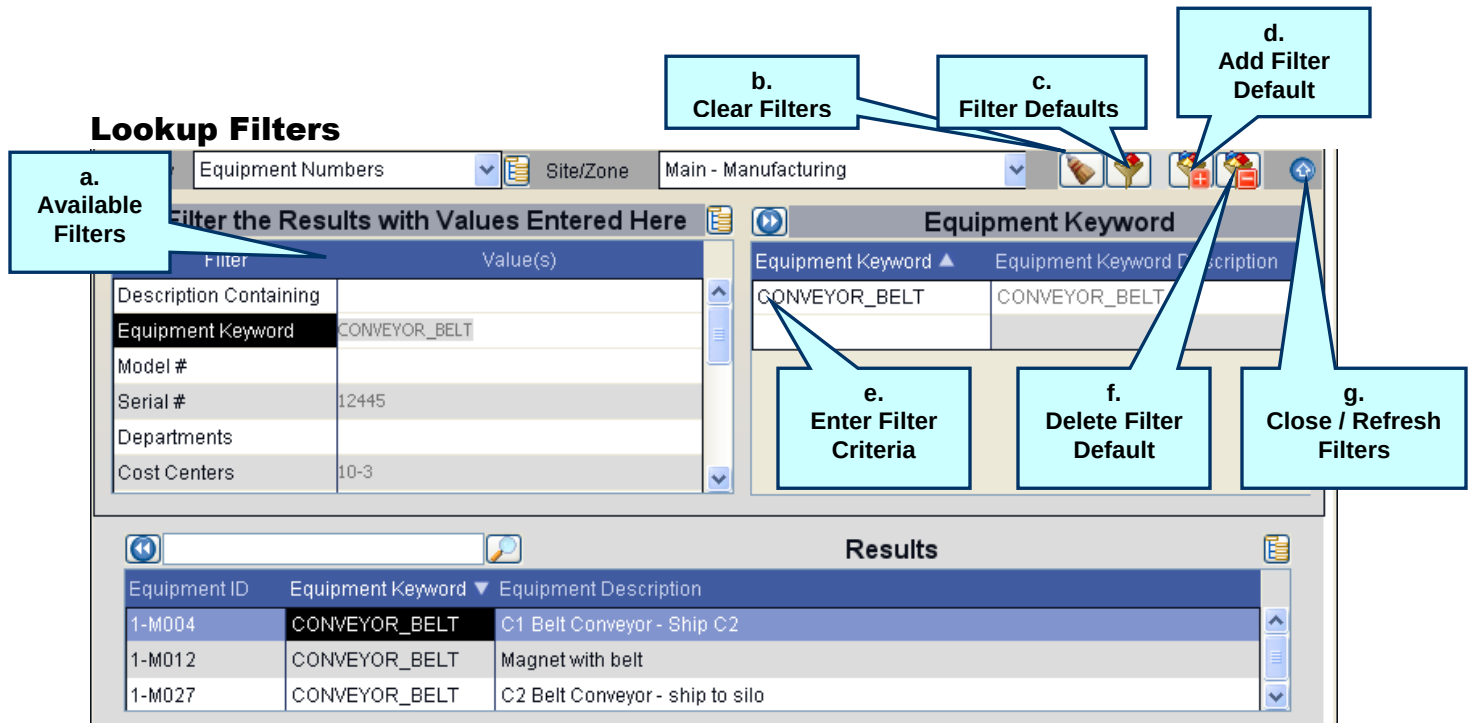
d. Filter Options

e. Sort Columns

f. Selection Bar

Equipment ID	Equipment Keyword	Equipment Description
1-M004	CONVEYOR_BELT	C1 Belt Conveyor - Ship C2
1-M008	FAN	Fan
1-M010	BLOWER	Blower
1-M012	CONVEYOR_BELT	Magnet with 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.
-



- Select from the scrollable **Available Filters** list.
- Click the **Clear Filters**  icon to remove all of the filter criteria you entered.
- Use **Filter Defaults**  to load frequently used filter criteria. Each user can create their own list of filter defaults for any lookup.
- Click  to **Add a Filter Default** for the current filter criteria.
- 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.
- Click  to **Delete the Filter Default** currently loaded (step c).
- Click  to close the filter window and refresh the lookup for the selected criteria.
Alternatively, click  in the top toolbar to refresh the lookup while viewing the filter options.



SECTION A. 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.

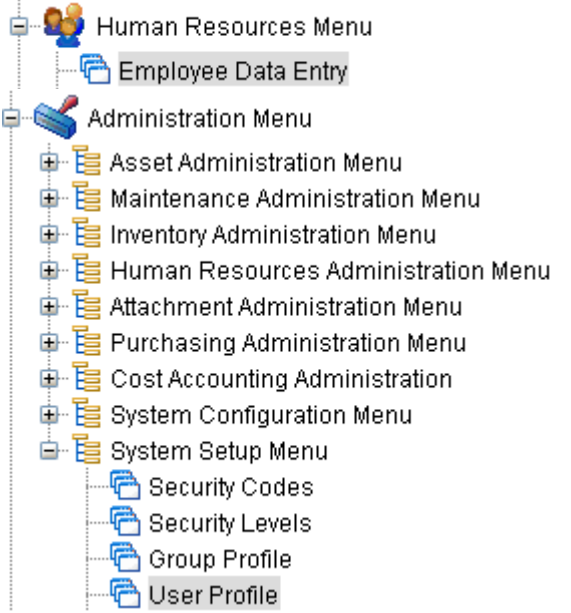
Having an organized, planned approach to implementing the system will save valuable time later on.

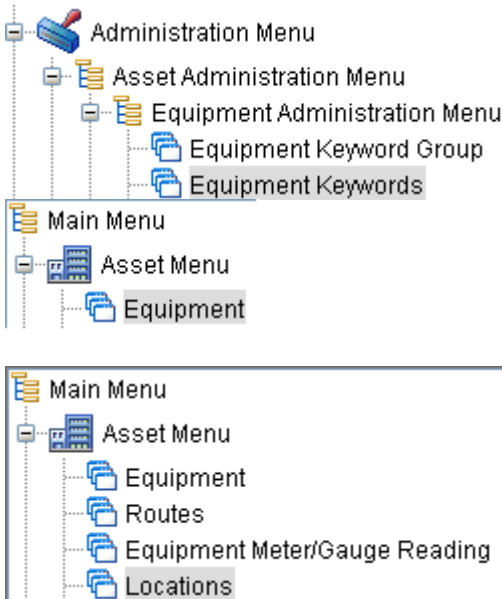
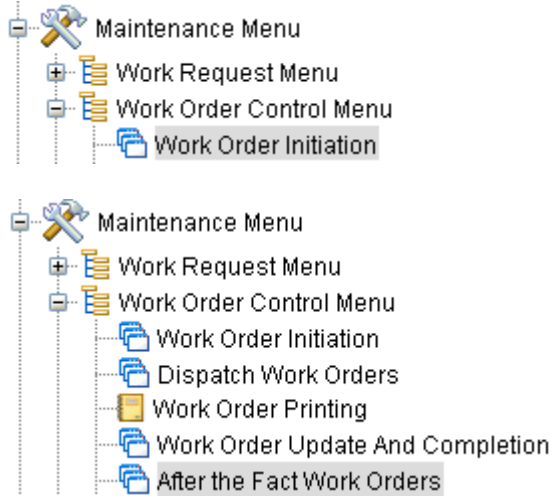
Use this guide to help you get started on the right track in MAPCON.

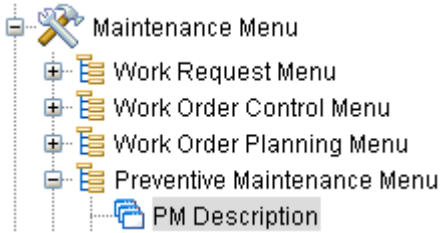
Note: You must have the appropriate security and authorizations to perform or even be able to see some of the following Menu Options, Screens or other functions. In other cases, your particular system may have been changed to fit the needs of your company. In this case, menu options may be deleted, changed 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.

TOPIC	WHERE TO START	SPECIAL NOTES
➤ Software Configuration switches need to be set. Discuss how each MAPCON module will be used and how day-to-day procedures are integrated into MAPCON. Note: Many switches are only available in the Pro version	 Administration Menu - Asset Administration Menu - Maintenance Administration Menu - Inventory Administration Menu - Human Resources Administration Menu - Attachment Administration Menu - Purchasing Administration Menu - Cost Accounting Administration - System Configuration Menu - System Setup Menu	Most Software Switches can be set or changed at any time in the future. However, it is very important that the Cost Accounting switches are set first before starting.
Codes and Validations are used throughout the system to provide Lookups, to ensure data integrity, and to provide searching and sorting options. Some validations can be built as you enter data, such as cost centers. However, a thorough review of all validations is highly recommended.	 Administration Menu - Asset Administration Menu - Maintenance Administration Menu - Inventory Administration Menu - Human Resources Administration Menu - Attachment Administration Menu - Purchasing Administration Menu - Cost Accounting Administration - System Configuration Menu - System Setup Menu	Create Cost Centers to track the cost of Labor, Material, Purchases and Services. Create at least one Craft to start with. Crews and Shifts are optional.
➤ Create Employees. ➤ Create User Profiles and / or Group Profiles to emulate your access requirements.	 Human Resources Menu - Employee Data Entry Administration Menu - Asset Administration Menu - Maintenance Administration Menu - Inventory Administration Menu - Human Resources Administration Menu - Attachment Administration Menu - Purchasing Administration Menu - Cost Accounting Administration - System Configuration Menu - System Setup Menu - Security Codes - Security Levels - Group Profile - User Profile	Create as many employees as needed. Workers from outside the company can be setup to have their time and activities tracked. Create users for anyone that will use the system. Experiment with various security, authorization and other options.

TOPIC	WHERE TO START	SPECIAL NOTES
➤ Create Equipment Keywords. ➤ Equipment Numbering and Hierarchical Structure need to be determined before any work orders or PM records can be created. ➤ Locations can be developed into a hierarchy by creating one level at a time.		Create at least one keyword in the system before starting. 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.
➤ Create Work Orders for Equipment, Locations, Cost Centers, or Routes using user defined types and priorities. ➤ After the Fact Work Orders are handy when the job has already been completed, yet you still want to have a history of the labor and the materials used.		Click on the main tab to generate the next available work order number. Enter all required, red fields before saving the work order. Quickly create work orders with a minimal amount of data and mouse clicks.

➤ Preventive maintenance requirements should be identified. ➤ Determine how often they occur by creating a Frequency. ➤ Then Generate PM work orders. Many facilities generate on Friday for the following week, allowing time to plan labor and materials.		Weekly, monthly, and Annual PM records need to be established prior to PM Generation. PM's can be established right from the Equipment, Location and Cost Screens.
--	--	--



Setup Steps

The following is intended as a guide to setup MAPCON from scratch. For an effective implementation, follow the step by step list. The sections that follow will try to follow this progression.

Items in Blue are covered in this Getting Started Manual

1. Required Data Entry to use System

- a. Sites
- b. Zones
- c. Users * possibly already setup
- d. Security * possibly already setup
- e. Review system switches/settings

2. Before entering Equipment/Assets

- a. Keyword Groups
- b. Equipment Keywords

Optional Data entry

- c. Cost Centers
- d. Departments
- e. Locations
- f. Vendors
- g. Manufacturers
- h. Safety Procedures
- i. Job Steps
- j. Materials/Inventory
- k. Meter and Gauge Units
- l. Equipment Status Codes

3. Before entering Locations

- a. Location Layouts
- b. Location Keywords

Optional Data entry

- c. Cost Centers
- d. Departments
- e. Locations
- f. Safety Procedures
- g. Job Steps
- h. Materials/Inventory

4. Before entering Work Orders

- a. Entities to charge work orders against i.e. Equipment, Locations or Cost Centers

5. Before Entering PM's

- a. Entities to charge work orders against i.e. Equipment, Locations or Cost Centers

SECTION B. SITES AND ZONES

Note: Zones are only available in the Pro version

Sites and zones are used to segregate data in MAPCON. Use Sites to segregate facilities in different physical locations, such as plants in separate geographical areas (cities, states, counties, etc).

The primary features of sites are:

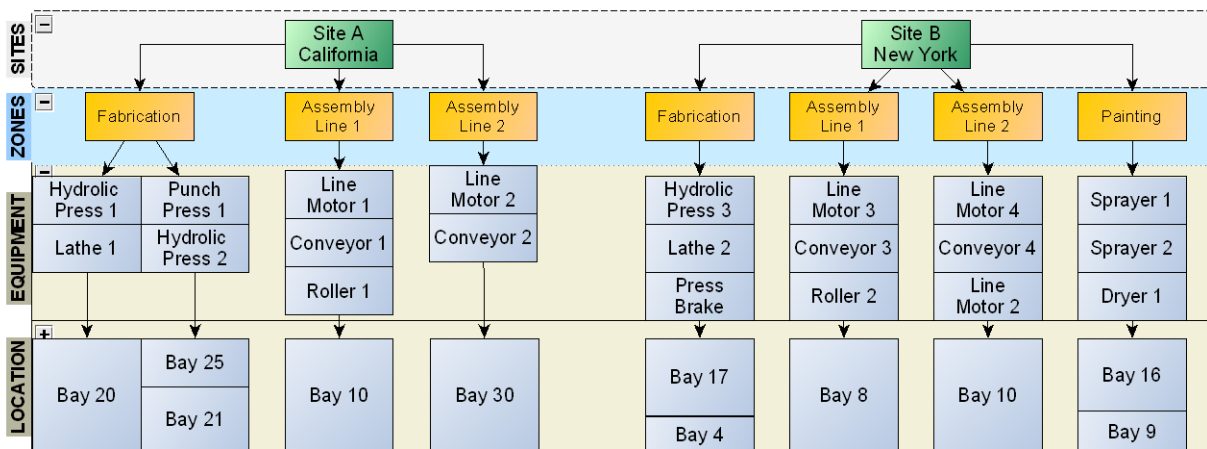
1. Separate corporate logos and verbiage on printed Purchase Orders (Purchasing Module).
2. Separate Bill To / Ship To addresses (Purchasing Module)
3. Individual users have access to view or report on data from “their” site(s).
4. Site specific data such as: Vendors, keywords, Inventory, crafts, PM Descriptions, etc.
5. Correct Weighted Average or LIFO/FIFO costing with the Advanced Inventory Module.
6. Improved reporting.

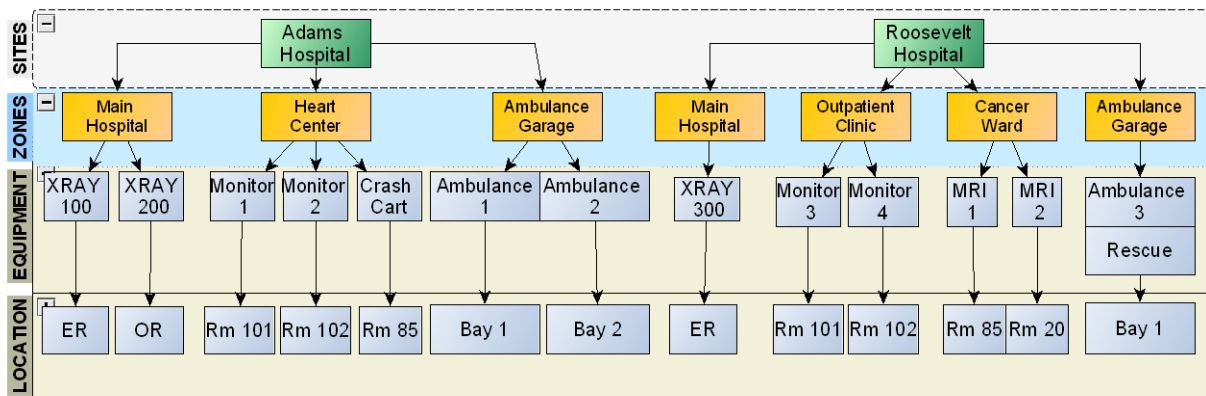
MAPCON is delivered with one site license. Additional site licenses can be purchased.

Use Zones to be further segregate data, such as Equipment, within a site. If we consider a parent – child relationship, the Site would be the parent and the Zones would be the children. This is a one-to-many relationship, meaning that each Site can be associated with many Zones. However, Zones can only be associated with one Site. Please keep in mind that every Site must have at least one Zone. Locations and equipment are assigned to Sites and Zones and therefore can be considered another level below, possibly even to be considered grandchildren in a hierarchical structure.

Zones are generally used to segregate equipment and locations so only the groups of people that deal with maintenance activities on these items have access to their data, additionally cutting down on the amount of data that has to be processed in lookups and on reports.

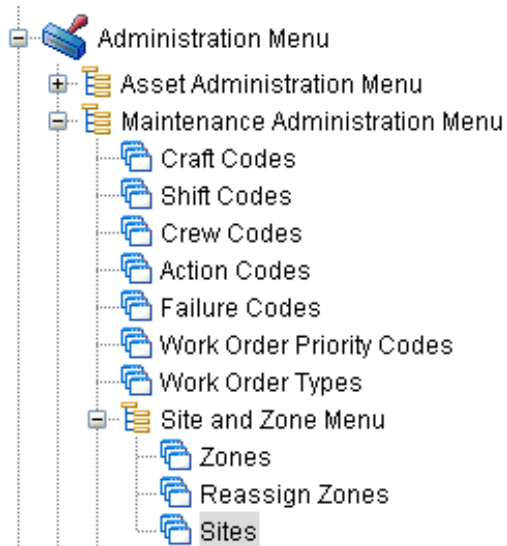
Below are a couple of simple examples of a site - zone structure:





Editing and Renaming the Default MAPCON Site

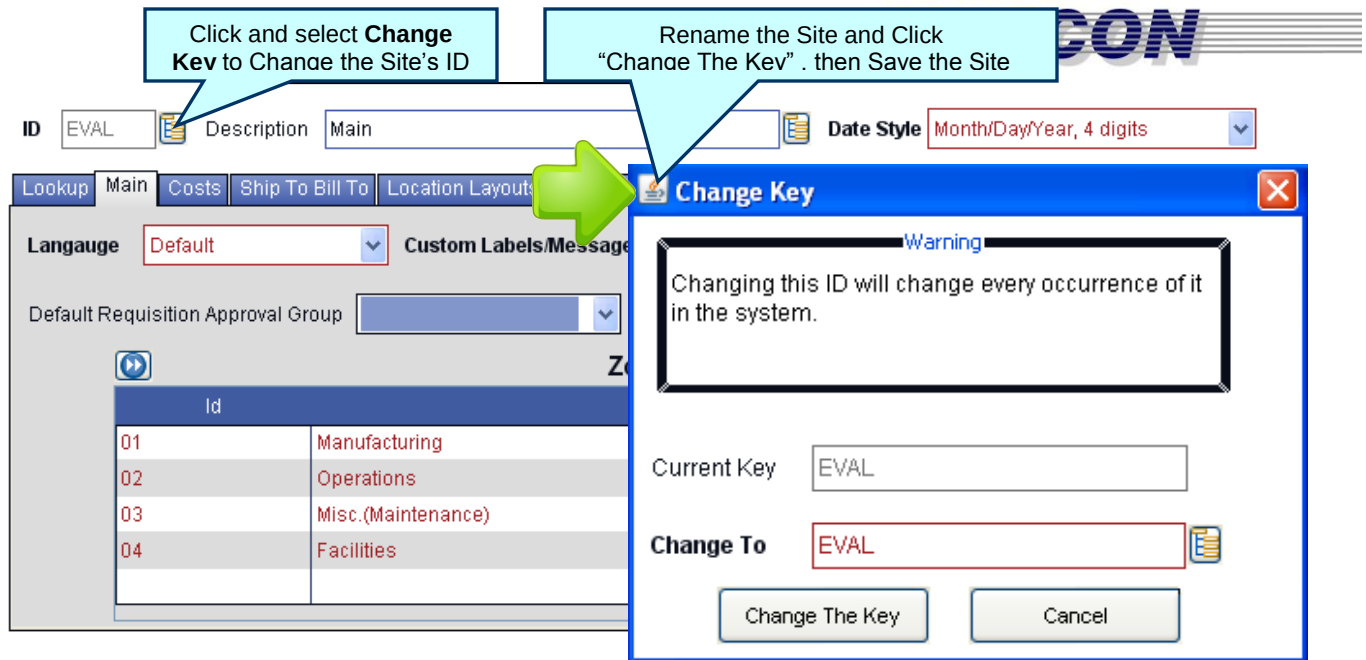
The standard MAPCON system starts with a single site. Sites can be added to the system if it is licensed for additional sites. The evaluation system is licensed for five sites. If you want to add your own sites, it may be easier to start by renaming the original default site.



Double-click the **Administration menu**
 Double-click the **Maintenance Administration Menu**
 Double-click the **Site and Zone Menu**
 Double-click the **Sites** menu option.

Note: You must be authorized as a Site Administrator to access this screen.

Double-click on the Site you want to edit.



Select the site from the lookup. Then, click on the options icon  and select **Change Key** to change the name of this site. Edit the site name and click  to rename the site.

View Costs, change the Ship To/Bill To addresses for the purchasing system, or assign Location Layouts from the Site Data Entry screen. After you make your changes click **Save**  at the top of the window.

Tech Tip: The Change Key feature is available for most windows.

Creating a new MAPCON Site

The system must be licensed for more multiple sites before more sites can be added. Select **Site** from the **Site and Zone Menu** as described above, then click **Add** .

Enter an **ID** and **Description** of your new Site.

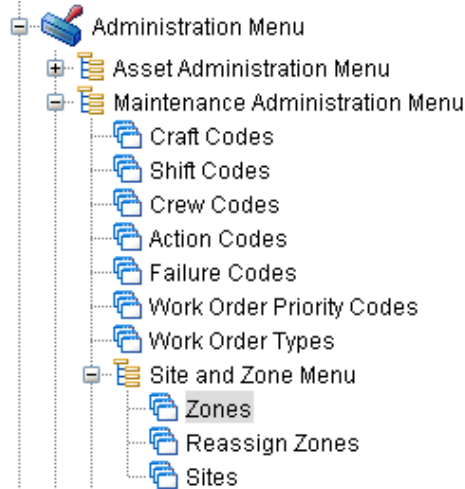
Enter at least one Zone and the Zone Description. The Zone does not have to exist. The system will create the zone(s) entered here, and assign them to the new site.

After you make your changes, click **Save**  at the top of the window.

Note: Be sure to assign yourself and others security access to use this Site. User Login profiles are covered later.

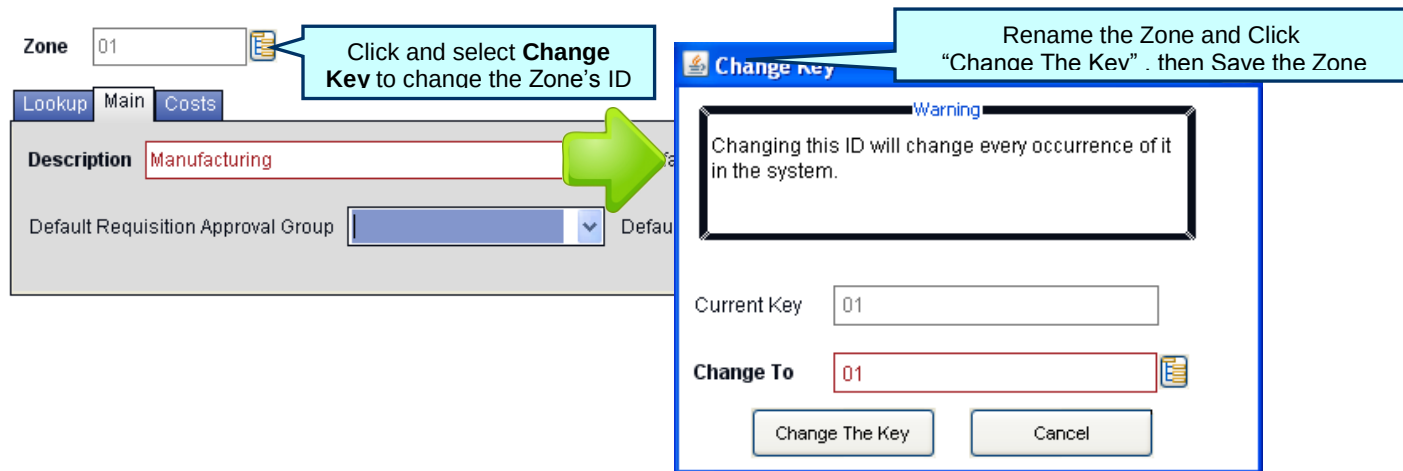
Editing and Renaming the Default MAPCON Zone

Note: Zones are only available in the Pro version



Double-click the **Administration menu**
 Double-click the **Maintenance Administration Menu**
 Double-click the **Site and Zone Menu**
 Double Click the **Zones** menu option.

Note: You must be authorized as a Zone Administrator to access this screen.



Double Click on the Zone you want to change from the lookup. Click on the options icon  and select **Change Key** to change the Zone's name. Edit the Zone name and click  to rename the Zone.

You can also view Costs from the Zone Data Entry screen. After you make your changes click **Save**  at the top of the window.

Creating a new MAPCON Zone

Select **Zone** from the **Zone Menu** as described above, then click **Add** .

Enter a **Zone ID** and **Description** for your new Zone. Then you must assign the Zone to a **Site**. After you make your changes, click **Save**  at the top of the window.

Note: Be sure to assign yourself and others security access to use this Zone.

SECTION C. SETTING UP USERS AND USER SECURITY

Follow these steps to start setting up MAPCON users:

1. Create Security Codes
2. Define Security Levels
3. Setup Group Profiles
4. Create User Logins and assign passwords, security access and authorizations.
5. Create Employee records.

Security is optional at this point. If you are not interested in exploring MAPCON 's extensive security features, then move on to step 3: Setting up Group Profiles.

Note: Extensive security setup is only available in the Pro version.

Establish a hierarchy of security levels using a set of **Security Codes** of three letters followed by a number (**MNT9**). An Administrator defines what these codes represent, and then assigns them to menu options and fields.

MNT Access Code – The three letter access code represents a user group or category, such as Maintenance or Administration. Some common codes are delivered with the system. The three system codes ALL (all users), SYS (System user), and NON (No user access) cannot be deleted.

9 Access Level - The number represents the access level within the category. The number is on a scale of 1 to 9 with 9 being the highest level.

Security Code Examples:

INV5 = Inventory, level 5
EQP7 = Equipment, level 7
MNT2 = Maintenance, level 2
PUR8 = Purchasing, level 8
SYS9 = System administrator, level 9 (Highest Security Code)

MAPCON Security is basically a comparison of codes. Here's how it works:

Security codes are assigned to icons, menu options, data entry windows or fields.

Users are assigned security codes in their User or Group Profile.

Upon login, the system interprets a user's assigned security codes and compares them to the security codes assigned to icons, menus or fields. If the security code on an icon, menu or field has a higher access level, or does not belong in the user's list of security codes, then those items are not displayed.

Example 1: If INV5 is placed on the Inventory Main Menu, then only users with the INV security codes and a number of 5 or higher can see the icon. Users with INV1, INV2, INV3 and INV4 access would not see the Inventory Main Menu. However, users with INV5, INV6, INV7, INV8 and INV9 access will see the Inventory Main Menu.

Example 2: A user has two codes: MNT2 and EQP5. If a security code of EQP7 is on the Equipment Data Entry menu option, then the user will not see that menu option. If a security code of MNT2 is on the Maintenance Main Menu and on the Initiate Work Order screen, then the user will have access to those areas. The Project Menu may have a security code of MNT9, which would prevent this user from seeing it.

For smaller operations, consider using the company's initials and then a number from 1 to 9 to simplify the hierarchy of codes. For example, the Acme Boxing Company uses 3 simple categories: ABC1, ABC5 and ABC9.

The security code SYS (System Administrator) is global and overrides all other system codes. If the user in **example 2** above had SYS1 access, then they would have access to ALL of those menu items otherwise.

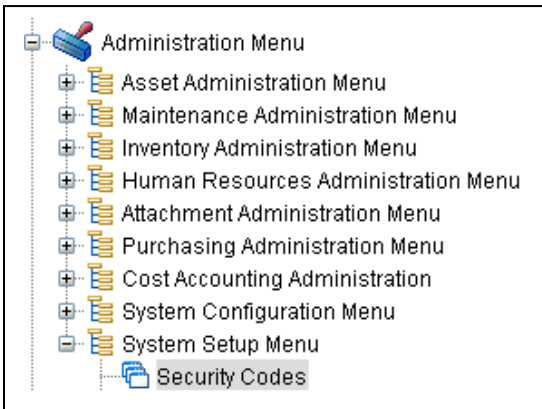
Therefore, the highest level of access is SYS9.

The security code ALL (All users) means just that, all users will have access.

The security code NON (No Users) means no user will have access, even SYS9. However, there is a security option on the user/group profile to enable these secured items. For example, the Purchasing Module is assigned NON access, but as a system administrator, you want to see this option.

1. Setup Security Codes

Note: Extensive security setup is only available in the Pro version.



Double-click the **Administration Menu**
Double-click the **System Setup Menu**
Double-click the **Security Codes** menu option.

Remember, these are categories of various groups of potential users in your organization. Multiple security codes and access levels can be assigned to a user / group profile. For example, a user may have Maintenance and Inventory security designations.

ID

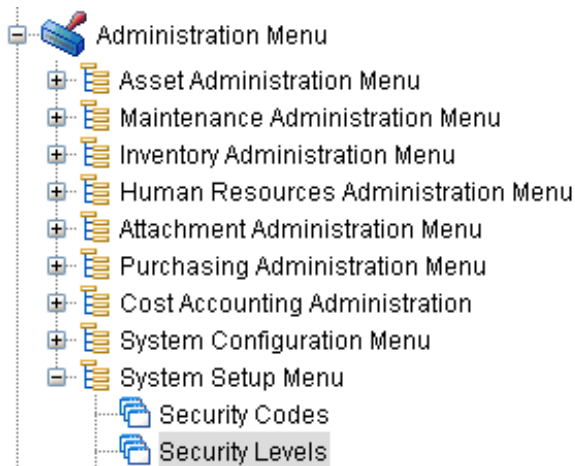
Select Security Code to Edit	
ID	Description
ADM	Administration
ALL	All Have Access
AST	Asset Management
FAC	FACILITIES
INV	Inventory
MNT	Maintenance
NON	None Have Access
PUR	Purchasing
SYS	System Level Access

Enter in the desired codes, and provide a brief description of what they mean for your organization.

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

2. Setup Security Levels

Note: Extensive security setup is only available in the Pro version.



Double-click the **Administration Menu**
Double-click the **System Setup Menu**
Double-click the **Security Levels** menu option.

The security codes (previous page) are the categories. Whereas, the **Security Levels** establish the access hierarchy.

Level 1 is always the lowest, and Level 9 is always the highest. Security Levels provide a simple solution of providing access from the basic equipment operator to the plant manager.

Security Level (Title) Access Code Access Level

☒ Display this Security Level in Lookups

Select Security Level to ...		
Security Level (Title)	Access Code	Access Level
ADMIN MENU ACCESS	AST	0
All Have Access	ALL	0
ASSET ACCESS	AST	0
ASSET ADMINISTRATION	AST	9
MAINTENANCE ACCESS	MNT	0
MAINTENANCE ADMIN	MNT	9
MAINTENANCE CLERK	MNT	5
MAINTENANCE PLANNER	MNT	8
None Have Access	NON	0
PURCHASING ACCESS	ADM	0
PURCHASING ADMIN	ADM	9
System Administrator	SYS	9

Enter in a **Title** to describe this Security Level, for instance Maintenance Planner or System Administrator.

Enter a Security **Access Code** from the dropdown list.

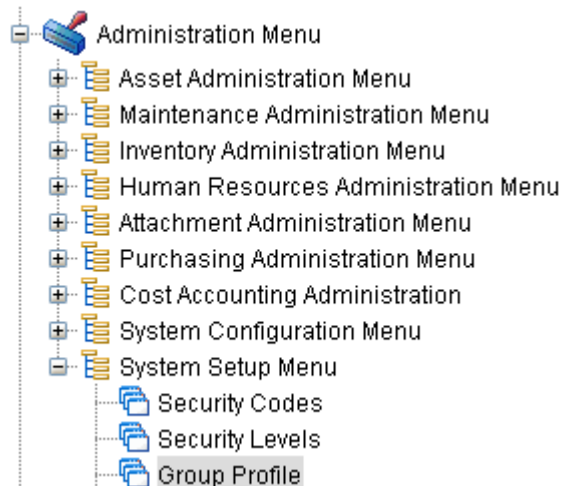
Then enter a number between 0 – 9 to set the **Access Level** of security applied to the code. Please refer to the security discussion above for more clarification.

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

3. Setup Group Profiles

Note: Extensive security setup is only available in the Pro version.

Group profiles allow you setup and assign security levels and authorizations once for a group of similar users. Group profiles are assigned to individual user profiles. Group profiles may be unnecessary for smaller organizations, but are almost essential for larger ones maintaining dozens or hundreds of users.



Double-click the **Administration Menu**
Double-click the **System Setup Menu**
Double-click the **Group Profile** menu option.

Enter a **Group Profile** name. This will usually be a short acronym as shown below, such as MNT_PLAN for MaiNTenance PLANner.

Then enter the **Title** for the Group profile.

Group Profile:

Assign System based Roles

Lookup Main Main and User Menu System Options Active Users

Title: ☐ Copy/Use Sites And Zones for User Profile

Security

Maintenance

Inventory

Purchasing

Assign Function based Roles for Each Module

Security Levels

Security Title	Security Code	Access Level
MAINTENANCE PLANNER	Maintenance	8
ASSET ADMINISTRATION	Asset Management	9
MAINTENANCE ADMIN	Maintenance	9

Select Access Level

Double Click to assign Access Levels to Profile

Security Title	Security Code	Access Level
ADMIN MENU ACCESS	Asset Management	0
ASSET ACCESS	Asset Management	0
ASSET ADMINISTRATION	Asset Management	9
MAINTENANCE ACCESS	Maintenance	0
MAINTENANCE ADMIN	Maintenance	9

Next, select the security levels for this group profile. Double click the desired access level on the bottom table labeled **Select Security Level**. The selected access level will be added to the groups **Security Levels** in the top table.

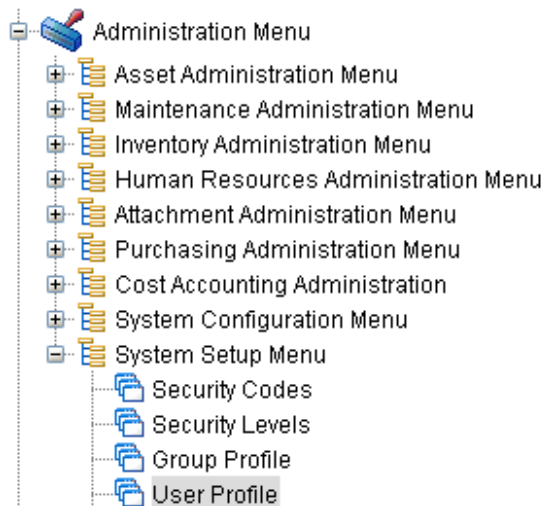
Tech Tip: To remove a Security Level, highlight the row then press the DElete key while holding down the CTRL(control) key. Use this process to delete rows anywhere in the system.

Review each side tab (**Maintenance**, **Inventory** and **Purchasing**) to assign the authorizations (roles) for each module. Then, when you assign a user to this group, they will inherit these authorizations. For example, users in a Maintenance Planner Group can approve work orders, but users in a Maintenance Clerk group cannot.

Review the  **System Options** tab to enable/disable system wide security options, such as allowing a user to change record keys or allowing a user to modify menus. Various look and feel options are also available.

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

4. Setup a User and assign a password, security and authorizations.



Double-click the **Administration Menu**
 Double-click the **System Setup Menu**
 Double-click the **User Profile** menu option.

Enter the **Employee Id** and press Enter.

Note: This step is optional for employees who do not login to MAPCON. However, employee information can be entered here by checking the ☒ **Employee** option.

Check the ☒ **User** option and enter a **User Login** name. A common practice is to use the user's first initial followed by their last name.

Employee Id ☒ User ☒ Employee User Login

Lookup Main Authorizations Site/Zone Menus Employee System Options Colors Revisions

Last First Init ☒ Active

Display Name Internal Phone

Password Confirm Password

Title Email

Language Custom Messages/Labels

Assign Group Profile Use this group profile for user settings

Copy Group Profile ☐ Assign a Group Profile to the user Profile

Enter the employee's **First** and **Last** name, and their middle initial. Notice how the system formats the **Display Name**. The **Display Name** is used for many transactions, on approvals, submitted/requested names, etc. Feel free to change its format, such as to put the last name first.

Check the ☒ **Active** option to fully enable the login. If the employee should leave the company, un-check the box to make them inactive. Inactive employees will not be displayed in employee lookups, but the information is retained for historical records.

Enter a **Password**. Enter it again to **Confirm Password**. Passwords cannot be more than 12 characters. Passwords are alpha/numeric, but are not case sensitive.

Optional: Enter the employee's **Phone** number, **Title**, and **Email** address. If you want to take advantage of MAPCON's e-mail features, then you must enter a valid e-mail address for each user.

Use this group profile for user settings

☒ Assign a Group Profile to the user Profile 

Check the ☒ Assign a Group Profile to the user option to assign a group **Profile** to the user's profile. Double click the **Profile** field to select the desired profile. All of the user's security access levels, authorization roles, and system security options will refer the group profile's settings. Depending on the profile's configuration, the user profile will either use the site/zone access from the group profile, or from the individual user profile.

If a group file is not assigned, then click **Authorizations** to view the user's authorization roles.

Employee Id  ☒ User ☒ Employee User Login 

Lookup Main **Authorizations** Site/Zone Menus Employee System Options Colors Revisions

Security

Maintenance

Inventory

Purchasing

Security Levels

Security Title	Security Code	Access Level
MAINTENANCE PLANNER	Maintenance	8

Assign System based Roles

Select Security Levels

Security Title	Security Code	Access Level
ADMIN MENU ACCESS	Asset Management	0
ASSET ACCESS	Asset Management	0
ASSET ADMINISTRATION	Asset Management	9
MAINTENANCE ACCESS	Maintenance	0
MAINTENANCE ADMIN	Maintenance	9
MAINTENANCE CLERK	Maintenance	5

Double Click to assign Access Levels to Profile

Assign Function based Roles for Each Module

Like the group profile, double-click security levels to assign them to the user profile.

Also, like the group profile, review each side tab (**Maintenance**, **Inventory** and **Purchasing**) to assign the authorizations (roles) for each module.

Review the **System Options** tab to enable/disable system wide security options, such as allowing a user to change record keys or allowing a user to modify menus. Various look and feel options are also available.

Click the **Site/Zone** tab to assign **Site/Zone** access to the user.

Employee Id: MECH ☐ User ☒ Employee User Login: JMECH ☐

Lookup Main Authorizations **Site/Zone** Menus Employee System Options Colors Revisions

Select User Sites from lookup of sites

Site	Description	Browse Only
EVAL	Main	☐
		☐

Double-click to assign Sites

Select User Zones From Lookup of Zones

Site	Zone	Description
EVAL	01	Manufacturing
EVAL	02	Operations
EVAL	03	Misc.(Maintenance)

Double-click to assign Zones

Primary Site: EVAL Primary Zone: 01 ☒ Zone Administrator ☐ Site Administrator

☒ Default To the Primary Site During Data Entry ☒ Default to the Primary Zone During Data Entry

Double Click the **Site** field to view a lookup of available Sites. Double Click the Site to select it.

Double Click the **Zone** field to view a lookup of available Zones for the selected Site(s). Double Click the Zone to select it.

Assign a **Primary Site** and **Primary Zone** for the user. When the user performs lookups or creates records, the system will use the **Primary Site** and **Zone** by default.

Check the boxes if this employee is a **Zone** or **Site Administrator** and can change Zone or Site information or add new ones.

Check the last boxes if their Primary Site or Zone should be used as the default for data entry.

Click the **Menus** tab to assign menu access, menu style, and dashboard access.

Employee Id ☒ User ☒ Employee User Login

Lookup Main Authorizations Site/Zone **Menus** Employee System Options Colors Revisions

Double Click to set Main Menu

Menu Id	Title
ADM_MENU	Administration Menu
ADM_REP_MENU	Administration Report Menu
ADM_ADV	Advanced Administration
ADM_ASSET_MENU	Asset Administration Menu
ASSET_MENU	Asset Menu
ASSET_REPORT_MENU	Asset Report Menu

Double Click to set User Menu

Menu Id	Title
ADM_MENU	Administration Menu
ADM_REP_MENU	Administration Report Menu
ADM_ADV	Advanced Administration
ADM_ASSET_MENU	Asset Administration Menu
ASSET_MENU	Asset Menu

Main Menu

User Menu

Menu Display

Dashboard Settings

Mode

To indicate which menu will be used most often, scroll through the list of available menus, highlight the desired option, then click the **Set Main Menu** button at the bottom.

Highlight the same menu or a different menu, then click the **Set User Menu** button at the bottom. Create use specific menus with the Menu Generator (required the Advanced System Utilities module) and assign them to users. Configure the menu security to block out unwanted items and when a user signs on, all they see is their user menu.

For the **Menu Display** on the right, click the down arrow and select either **Button** or **Hierarchy** to determine how the menu options are displayed. Below is an example of the button menu style intended for less computer savvy users.

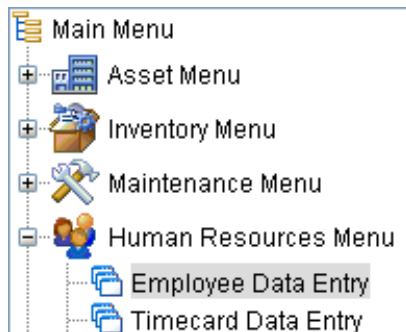
MAPCON Menu

File Edit Navigate Utilities Help

Main Menu	Open Work Orders By Equipment	Print Route Form
Asset Menu	Equipment Bill of Materials	Equipment Lists Menu
Inventory Menu	Equipment Meters	Equipment Costs Menu
Maintenance Menu	Meter Reading History	Previous Menu
Map	Top Equipment Sales	

Click **Save** at the top of the window when you have completed setting up the user profile.

5. Enter Employee Data



Double-click the **Human Resources Menu**
Double-click the **Employee Data Entry** 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 it's format, such as to put the last name first.

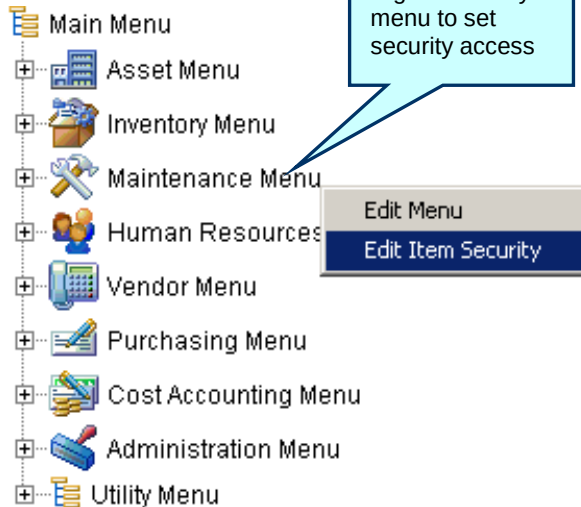
Assign a **Zone** to the employee. The system will add your primary zone as a default zone for the employee. Double-click the Zone field to select a different zone.

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.

SECTION D. SETTING UP THE BASICS

Menu Security



To add security to a menu option, **Right** click the desired menu and choose **Edit Item Security**.

Change the **Access Level** then the Access Code and Level will change accordingly.

To view user access, click the **Test** tab.

Click **Run Test** to display a list of users that will have access to the menu option.

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

Element Key: Maintenance Menu Element Type: Menu Item

Main **Test**

Menu Choice Access Level

Access Level: MAINTENANCE ACCESS Access Code: MNT Level: 0

Element Key: Maintenance Menu Element Type: Menu Item

Main **Test**

You can test the effects of any access level changes on users access by clicking on the "Run Test" Button.

Type: Menu Choice Access Level Key: Maintenance Menu Run Test

User			User Access Levels		
Last Name	First Name	Has Access?	Access Level	Access Code	Level
Mechanic	Joe	✓	MAINTENANCE PLAI	MNT	8
Prusha	Brock	✓			
TOBIASON	AARON	✓			
Tesdall	Joel	✓			
Tobiason	Aaron	✓			

Click user to see their access levels displayed above

Window and Field Security

Note: Extensive security setup is only available in the Pro version.

Security can be added to any window, and any field. Simply right-click on any field and choose the  **Edit Security** option.

WO 001144 Type Inspection Preventive Ma Status Planned Priority 2  

Lookup Main Other Information Attachments

Submitted By PM Schedule Phone 

Equipment 10-100 

Equipment Hierarchy

10-100 #10 1500/2000 KVA DRY-TYPE SUBSTATION 

Location 

Work / Problem Description

CHECK AND PERFORM MAINTENANCE DUTIES RELATED TO POSSIBLE OVERHEATING OF TRANSFORMER. CHECK LOW LEVEL AND/OR COOLANT NOT FUNCTIONING

 Remove Approval PM Schedule Approval Date 02/19/2010 

Element Key PHN_SUBMITTED Element Type Window Control

Main Test

Control Access Levels

View Access Level	MAINTENANCE CLERK	Access Code	MNT	Level	5
Edit Access Level	MAINTENANCE PLANNER	Access Code	MNT	Level	8

Record Edit Access Levels

Add Access Level	MAINTENANCE CLERK	Access Code	MNT	Level	5
Edit Access Level	MAINTENANCE CLERK	Access Code	MNT	Level	5
Delete Access Level	All Have Access	Access Code	ALL	Level	0

Options Access Levels

Access Level	Access Code	Level
All Have Access		
ASSET ACCESS		
ASSET ADMINISTRATION		
MAINTENANCE ACCESS		
MAINTENANCE ADMIN		
MAINTENANCE CLERK		
MAINTENANCE PLANNER		
None Have Access		

Annotations:

- Right click any field to assign it security access
- The name of the selected field.
- Controls access to selected field.
- Controls Add/Edit/Delete access
- Controls access to field options

The **Control Access Levels** section controls security access for the selected field.

The **Record Edit Access Levels** section controls Add, Edit, and Delete record access. The **Options Access Levels** section controls access to the various options available on the field (if available).

For each of these sections, choose the lowest access level allowed to perform the task.



When finished, click **Save**  at the top of the window.

SECTION D. SETTING UP THE BASICS (CONT.)

Creating Departments and Cost Centers

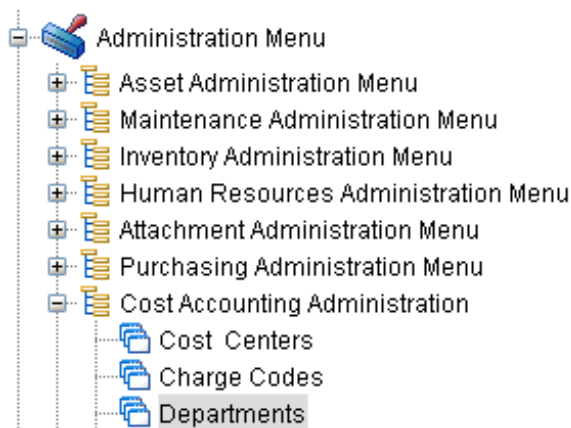
For a quick start, this is optional. However, it is recommended to use Cost Centers for more efficient tracking of labor, material, and purchasing costs.

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



Double-click the **Administration menu**
Double-click the **Cost Accounting Administration Menu**
Double-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 it's **Description**.

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

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

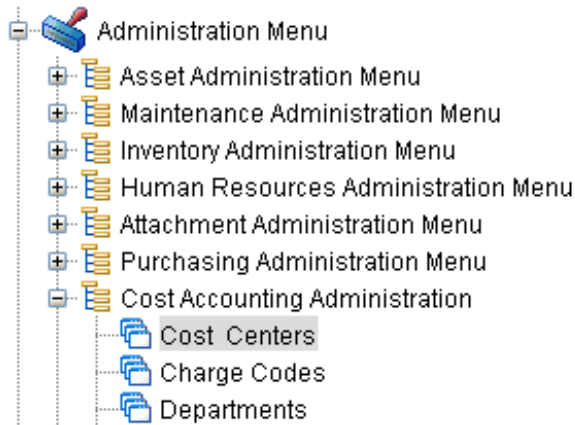
Dept  Requisition Approval Group

Lookup

Sort By 

Results	
Department ▲	Department Description
ADMINISTRATIVE	All Administration Areas
BUILDING	Building Complex
ENGINEERING	Engineering Areas
TRANSPORTATION	All Transportation Areas

Create Cost Centers



Double-click the **Administration menu**
 Double-click the **Cost Accounting Administration Menu**
 Double-click 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 **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.

SECTION E. 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:

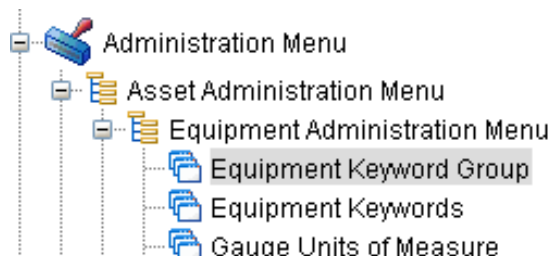
MOTOR	BELT	PUMP
MOTOR-AC	BELT-CONVEYOR	PUMP-ELECTRIC
MOTOR-DC	BELT-FAN	PUMP-WATER

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



Double-click the **Administration Menu** icon
Double-click the **Equipment Administration Menu**

Double-click the **Equipment Keyword Group** menu option.

Enter a **Group ID**, then press [Enter].

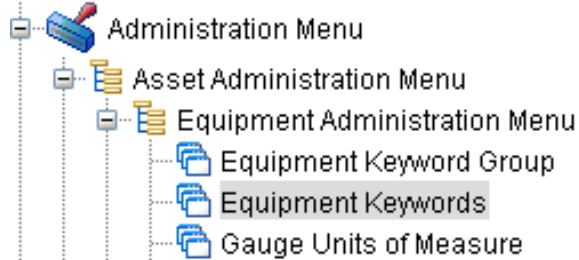
Keyword Group  

Keyword Groups	
Group ID ▲	Description
FACILITY	Facilities
MOTOR	All AC and DC Motors
PLANT	Plant Operations
VEHICLE	Automotive

Enter the Keyword Group **Description**.

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

Enter Equipment Keywords



Double-click the **Administration Menu**
Double-click the **Equipment Administration Menu**

Double-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

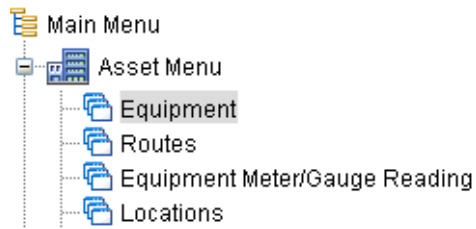
Forklift

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



Double-click the **Asset Menu**
Double-Click the **Equipment** menu option.

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

Eqp ID Parent Eqp

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 **Eqp 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 Eqp** (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 Eqp** is blank for equipment in the first level. The second sub component will have the first level equipment number as its **Parent Eqp**, 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.

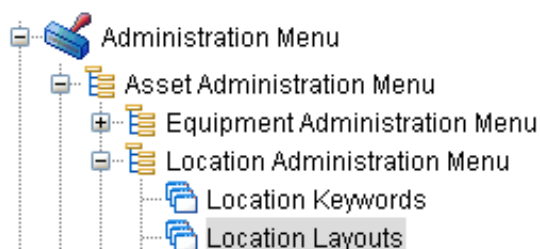
Click **Save**  at the top of the window when finished.

EQUIPMENT SETUP IS COMPLETE.

Creating Location Layouts

Note: Location layouts 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.



Double-click the **Administration Menu**
Double-click the **Asset Administration Menu**
Double-click the **Location Administration Menu**
Double-Click the **Location Layouts** menu option.

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

Location Layout

BLD_FLR_RM_SRM Building, Floor, Room, SubRoom

Lookup Main Sites

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

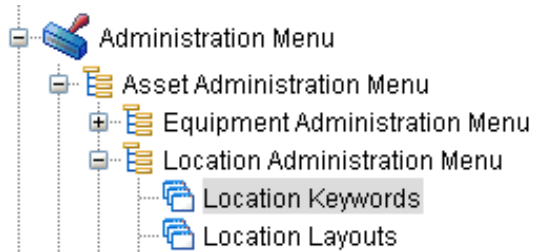
To create a new layout, type a new name for your Layout in the **Location Layout** field and press Enter. Then, enter a description for your layout. In the **Layout Labels**, enter the labels you want to display when entering in locations using this layout.

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



Double-click the **Administration Menu**
 Double-click the **Asset Administration Menu**
 Double-click the **Location Administration Menu**
 Double-click the **Location Keywords** menu option.

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

ID

Lookup Main Sites

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 Locations

Note: Location hierarchy is only available in the Pro version.

Main Menu

- Asset Menu
 - Equipment
 - Routes
 - Equipment Meter/Gauge Reading
 - Locations

Double-click the **Asset Menu**
Double-click the **Locations** menu option.

Layout

Level 1

Level 2

Level 3

Level 4

Level 5

+ Add

STANDARD

PLANT

PRODUCTION

LINE-2

ASSEMBLY

Lookup

Main

Safety Procs

Job Steps

Bill Materials

PM Procs

Equipment

Attachments

Costs

Purchases

Zone 01 Manufacturing

Keyword FACILITY GENERAL BUILDING AREAS Open Work Orders

Rating Critical Square Feet 0.0 Square Feet In Hierarchy

Description
PRODUCTION SECTION -LINE 2 WASSEMBLY

Cost Center 3200 Production Fabrication

Department PRODUCTION All Production Areas

Location Levels are based on the layout

Layout

BUILDING

FLOOR

WING

ROOM

BUILDING

KING-HOSP

SURGICAL

WEST

OPER-ROOM2

The headers change when the layout changes.

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.

Layout BUILDING FLOOR WING ROOM

BUILDING [redacted] [Options icon]

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

Sort By Building Layout [Options icon] Site/Zone Main - Manufacturing [Options icon]

Large Layout
Standard Layout
Building Layout
<None>

WIN

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 [Options icon]

Zone - Use the Options icon [Options icon] to select the Zone for this location. The system will assign the user's primary zone as a default.

Enter a **Keyword**. Use the Options icon [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 [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** [Save icon] then click **Home** [Home icon] when finished. Now, let's create the next level:

Layout BUILDING FLOOR WING ROOM

BUILDING [redacted] [Options icon]

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

Sort By Building Layout [Options icon] Site/Zone Main - Facilities [Options icon]

BUILDING ▲
BUILDING_A
TRLSCHOOL

FLO

LOWL-ELEM

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 [Add icon] button.

Layout	BUILDING	FLOOR	WING	ROOM
BUILDING	BUILDING_A			

After entering the floor, complete the location record by entering the description, keyword, etc. When finished, Click **Save**  then click **Home** .

To create the next Level (FLOOR)

Third: Enter the second level designation. In this example, enter **1** for the FLOOR.

Layout	BUILDING	FLOOR	WING	ROOM
BUILDING	BUILDING_A	1		

Lookup: Main Safety Procs Job Steps Bill Materials Specs PM Procs Equipment Attachments Purchases

Sort By: Building Layout Site/Zone: Main - Manufacturing

BUILDING ▲	FLOOR
BUILDING_A	
BUILDING_A	1

To create the next Level (WING)

First: Double-click and load the parent. In our example, double-click and load BUILDING_A, floor 1.

To create the next Level (WING)

Second: Click the  button.

Layout	BUILDING	FLOOR	WING	ROOM
BUILDING	BUILDING_A	1	WEST	

After entering the floor, complete the location record by entering the description, keyword, etc. When finished, Click **Save**  then click **Home** .

To create the next Level (WING)

Third: Enter the third level designation. In this example, enter **WEST** for the WING.

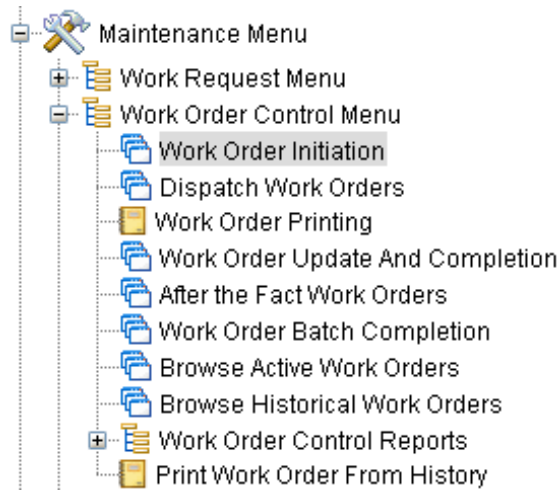
Continue the next step and add a Room to your location.

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.

SECTION F. PROCESS A WORK ORDER

Initiate a Work Order



Double-click the **Maintenance Menu**
Double-click the **Work Order Control Menu**
Double-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.

Equipment	▼
Cost Center	
Equipment	
Location	
Equipment Move	
Route	

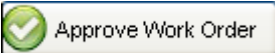
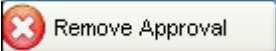
Next, select the type of asset to for your work order.

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

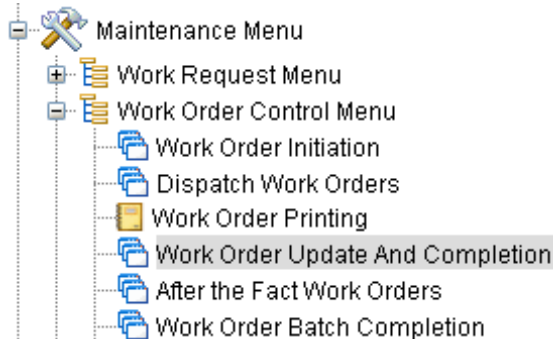
Click **Save**  at the top of the window to create this work order. The work order number will appear in the bottom right hand corner **Key (000004) Created**.

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

Click  on the top menu bar to close the window.

SECTION F. PROCESS A WORK ORDER (CONT.)

Complete a Work Order



Double-click the **Maintenance Menu**
 Double-click the **Work Order Control Menu**
 Double-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 Manufacturing

Lookup Main Work Description Labor/Material Timecards Non Stock Purchasing Meters/Gauges Attachments Costs

Equipment Description

Equipment Location

Date Planned Planned By Date Required

Completion Date Completed By

Failure Action

Comments

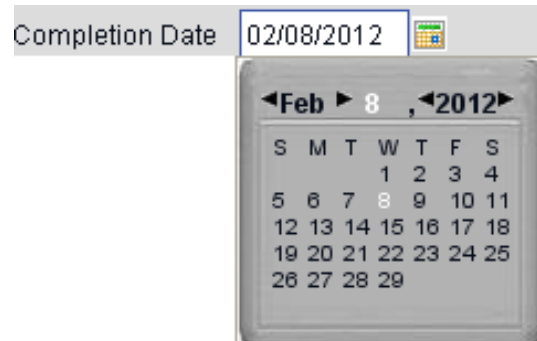
Made system correction

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  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  on the top menu bar to close the window.

WORK ORDER PROCESS IS COMPLETE.

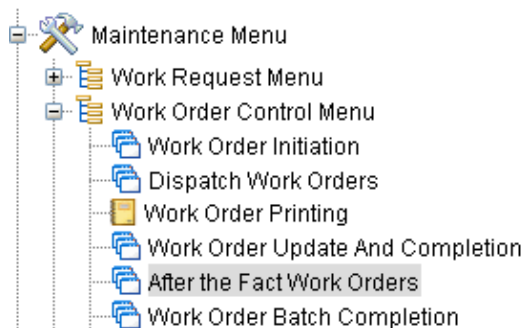
SECTION F. PROCESS A WORK ORDER (CONT.)

After the Fact (One Step) Work Orders

Note: After the Fact Work Orders are part of 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.



Double-click the **Maintenance Menu**
Double-click the **Work Order Control Menu**
Double-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

Date Completed By

Equipment Location

Equipment Hierarchy

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

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!**

SECTION G. PREVENTIVE MAINTENANCE

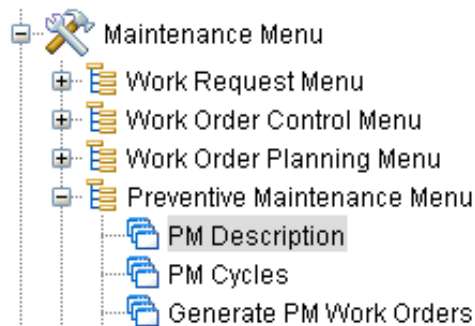
There are three steps involved in generating preventive maintenance work orders:

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



Double-click the **Maintenance Menu**
Double-click the **Preventive Maintenance Menu**.
Double-click the **PM Description** menu option.

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

PM Desc # PM0005 Title OSHA INSPECTION PREP (SEMI-ANNUALLY)

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

Work Order Status Scheduled Type Inspection Preventive Priority 4 Status Approved

☒ Allow Duplicate Work Orders ☐ Generate Work Orders On the Basis Of Date Last Done Advance # Days 0

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 0

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.

- 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 Description **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.

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.

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, then do not check this box.

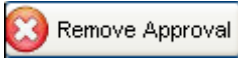
Enter the **Advance # of Days** if more time is required for ordering materials and ensuring they arrive on time. Also, use this option to generate PMs early for fill work. Setting this field will **not** adjust the work order's **Required Date**. For example, the Required Date is set to the frequency's 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

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.

This quick start guide will focus on the minimal amount of information required to start generating PM work orders.

Adding Assets to the PM

PM Desc # PM0003 Title OIL CHANGE (TRANSPORTATION)

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

Equipment/Locations/Cost Centers/Routes For PM

Type	Eqp/Loc/Rt/CC	Description
Equipment	370-T	1/2 TON CHEVY PKUP -TRANSPORTATION
Equipment	550-T	2005 CHEVY SUBURBAN -TRANSPORTATION
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)

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

PM List

Frequencies

Type Equipment Eqp/Loc/Rt/CC 102

Serial # 654867HV Model #

Desc PRODUCTION -LINE 2 MAIN PLANT Extended Definition

Elapsed Time/Meters 52 Week Gauges

Freq None

<None>
 Daily
 Weekly
 Monthly
 Quarterly
 SemiAnnually
 Annually
 None

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

Meters

M#	Units	Curr Total	LastPMTot	Interval
----	-------	------------	-----------	----------

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

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

PM Desc # PM0003 Title OIL CHANGE (TRANSPORTATION)

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

PM List

Frequencies

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

Serial # Model #

Desc MAIN MOTER FOR CONV-1 Extended Definition

Elapsed Time/Meters 52 Week Gauges

Freq Monthly Mult 1 Generate Wos On Basis of Date Last Done Delete

Day Lst Due 03/13/2010 Lst Done 12/16/2009 Last Gen 10/19/2010 Adv Days 5 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

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

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 **Freq** (Frequency) first, then the other fields will appear.

The **Mult** (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.

Lst 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 Lst Due date to 06/07/12.

Ex. 2: to have a Quarterly PM generate on 12/01/12, set the Lst 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 Lst Done date field to trigger the PM.

Lst 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 Lst Done date to 06/07/12.

Ex. 2: to have a Quarterly PM generate on 12/01/12, set the Lst 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 Lst 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.

Meters

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

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

Week	Date	Generate
1	01/01/2010	☐
2	01/08/2010	☒
3	01/15/2010	☐
4	01/22/2010	☐
5	01/29/2010	☒
6	02/05/2010	☐
7	02/12/2010	☐

Occurs

Day

Last Week

Last Due

Last Done

☒ Uses Default Labor

Advance Days

Next Week

Last Gen

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

Elapsed Time/Meters
52 Week
Gauges

☒ Allow Duplicate Work Orders

Last Due

Last Done

Last Gen

☒ Uses Default Labor

Gauges

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).

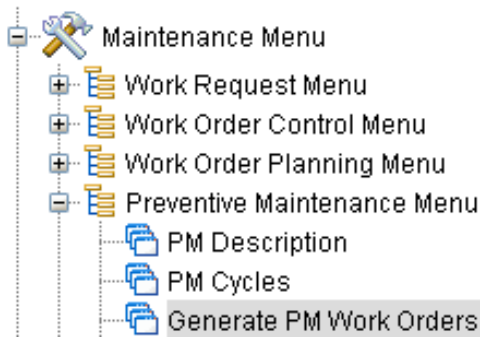
Last Reading The last time this gauge was updated.

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.

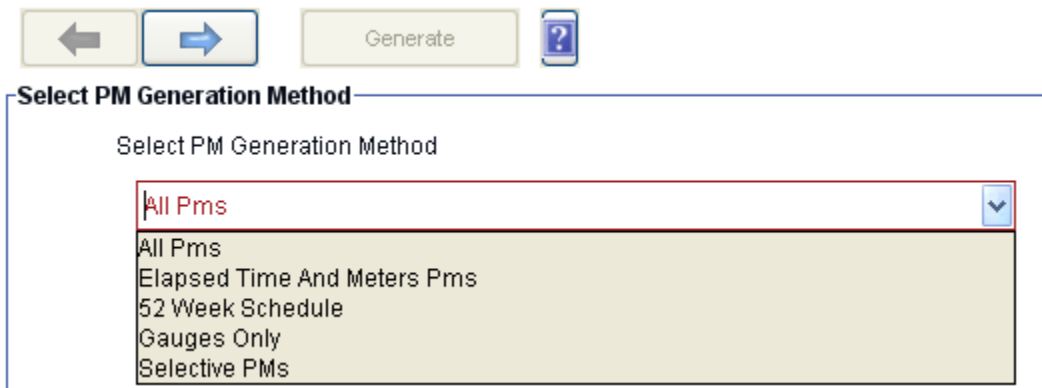
3. Generate PM Work Orders



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

Double-click the **Maintenance menu**
Double-click the **Preventive Maintenance Menu**
Double-click the **Generate PM Work Orders** menu option.

Select View & Order



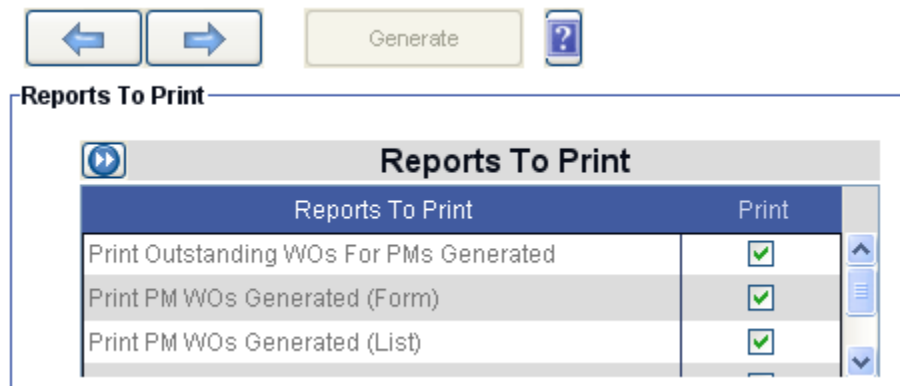
Select the type of frequencies that should be generated. Select **All PMs** to generate for all frequencies, or choose individual frequencies.

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



Reports To Print	Print
Print Outstanding WOs For PMs Generated	☒
Print PM WOs Generated (Form)	☒
Print PM WOs Generated (List)	☒

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

Starting Date

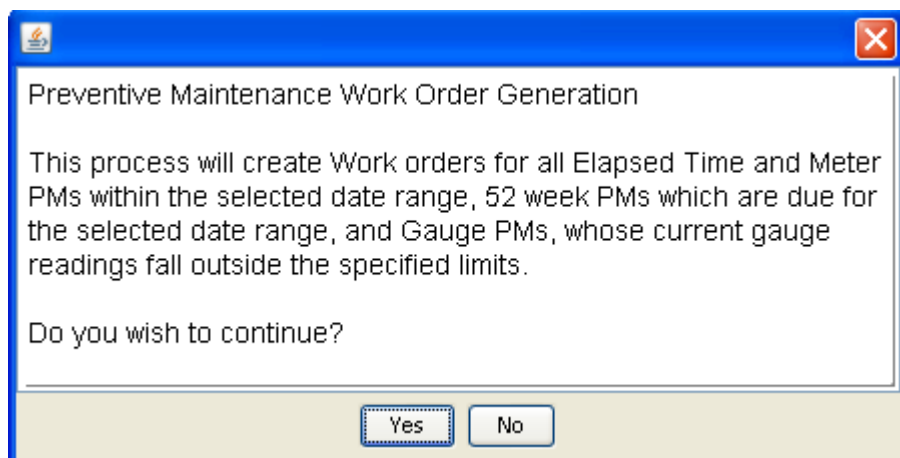
11/01/2010 02/08/2012

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

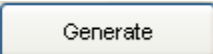


Ready To Process

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:

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.

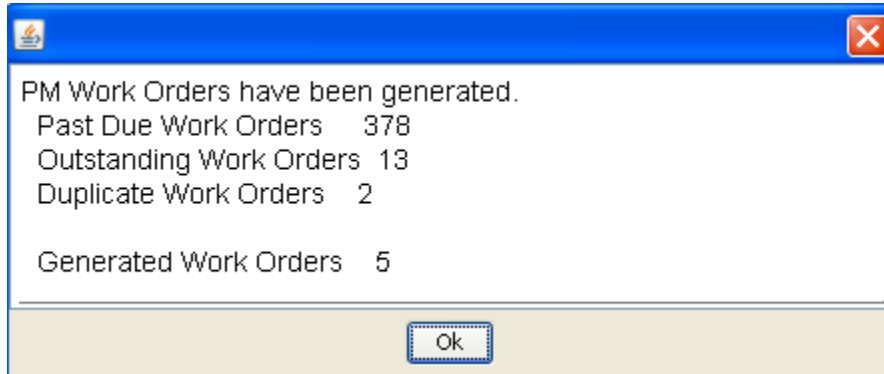
The generation process will always double check to see if there are any Past Due Work Orders. PM Work Orders are past due if they have not been generated and the current date is beyond their due date. This can happen when setting up new PM frequencies, or if PMs have not been generated regularly.

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

Generic Lookup Window								
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: 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.

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 and click the **Users Group** link for more details.

TRAINING

The key to any successful facility is proper training. MAPCON is *the most productive tool you will ever use* when you know what it can do and learn how to use it.

MAPCON Technologies, Inc. provides a variety of training. First, you will be attending the MAPCON **System Managers Training** class at our training center in Des Moines, Iowa. This is a "Fundamentals of MAPCON" course designed for new installations of MAPCON or as a refresher course for new staff recently involved with the software. Training focuses on usage of each module in MAPCON. New users will be able to utilize this information to better implement their MAPCON systems.

On-Site User Training at your location is an effective way to group trainees together to focus on training of operations, or train production employees that would only utilize segments of your MAPCON system. This training comes later, once your system is setup. When ready, you'll want to concentrate on training larger groups or target specific areas.

Training schedules vary with demand. For more information on training schedules, see our web site at 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.



NOTES:

The Most Productive Tool You Will Ever Use!



MAPCON

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