



Creating PM Schedules

SynergyMMS handles Preventive Maintenance in a very unique method that puts most of the burden into the program and less onto the operator. It allows for defining PM Schedules, and then connects Equipment or Rooms with the Schedule.

For example, within the Equipment List is defined all of the Equipment in a given facility. Similar pieces of Equipment will have similar needs for Preventive Maintenance. The same is true regarding Rooms. In SynergyMMS Users can define that need once. The need is called a Schedule, and the Schedule must define a frequency for the work to be done. Once the Schedule is defined, you simply connect pieces of Equipment or Rooms to that Schedule. The design behind SynergyMMS is to generate PM's as they are due once a day or once a week based on the setting in the preferences. This generation process is done by our PMGenerator which resides on our server and is constantly checking schedules that are due. .

From an Engineering point of view, a guest room may need to have the filters changed in the Fan Coil four times a year, the Fan Coil inspected twice per year, and performance of a semi-annual inspection of the rooms. Housekeeping may be interested in deep-cleaning the room once per year, and rotating the mattresses every six months. To best utilize available staffing, it would be best to space these activities over the course of the entire year.

The process is very straightforward and involves the following:

- Define the name of each schedule.
- Define the frequency it is to be performed.
- Describe the details of what is to be done.
- Connect the Equipment or Rooms to the Schedule.

Here is how you set it up:

First, you need to create a new PM Schedule or select one of those from the list that is already created. We will begin by creating a new schedule. From the ToolBox select Preventive Maintenance / PM Schedules:

When the list appears, click the Add button to add your new schedule..

Fill in a name for our new schedule in the Schedule Name field. .

The screenshot shows the "PM Schedules" window. At the top, it displays "447 PM Schedule(s)". Below this is a table listing various schedules with columns for Schedule Name, Type, Frequency, Mode, Repair Dept., Repair Trade, and Assigned To. The "BALLROOM LIGHTS" schedule is highlighted in blue.

Schedule Name	Type	Frequency	Mode	Repair Dept.	Repair Trade	Assigned To
CHILLED WATER PUMP SEMI-ANNUAL	Equipment	SemiAnnual	Regular	eng	ENGR	gold, KARY
AHU SEMI ANNUAL MAINTENANCE	Room	SemiAnnual	Regular	eng	ENGR	Elvis, ENG
B1 GENERAL CLEANING 18TH TO 27TH	Equipment	Annually	Regular	eng	None	None
B3 GUESTROOM CARPET EXTRACTION	Equipment	SemiAnnual	Regular	None	None	None
BALLROOM LIGHTS	Equipment	Custom	Regular	None	None	None
CHAIR GLIDE WEEKLY INSPECTION	Room	Weekly	Regular	eng	ENGR	davis, ANDY
CONDENSATE RECEIVER PUMP SEMI-...	Equipment	SemiAnnual	Regular	eng	ENGR	gold, KARY
CONDENSER WATER PUMP SEMI-AN...	Equipment	SemiAnnual	Regular	eng	ENGR	gold, KARY
CONDENSING UNIT WK-10	Equipment	SemiAnnual	Regular	None	ENGR	baker, EARNEST
CONDENSING UNIT WK-11	Equipment	SemiAnnual	Regular	None	ENGR	baker, EARNEST
CONDENSING UNIT WK-6	Equipment	Monthly	Sliding	None	ENGR	baker, EARNEST
CONDENSING UNIT WK-7	Equipment	SemiAnnual	Regular	None	ENGR	baker, EARNEST

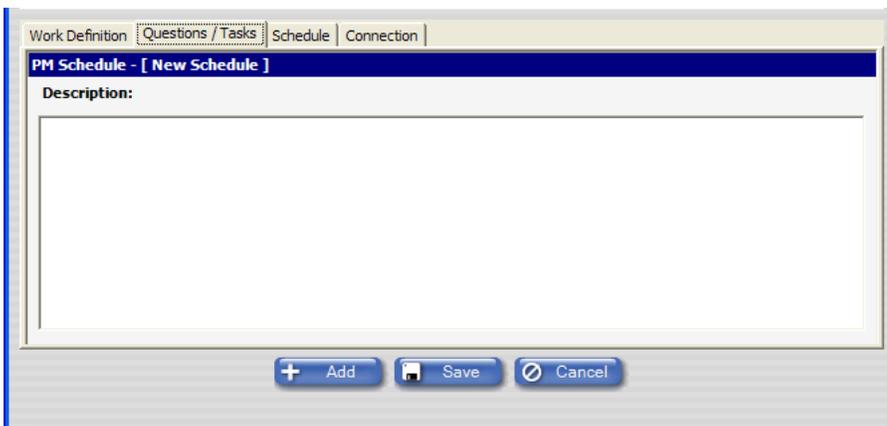
Below the table is a form for creating a new schedule. The "Schedule Name" field is filled with "BALLROOM LIGHTS". Other fields include "Schedule Type" (radio buttons for Equipment and Location), "Issuing Dept.", "Repairing Dept.", "Trade", "Spec Projects", "User Defined 2", "User Defined 3", "Assign To", "Output To", "ECT", and "Priority / Filter". At the bottom are "Add", "Save", and "Cancel" buttons.

Now fill in the other fields.

Work Definition tab:

- **Equipment / Location**:- There are clearly different PMs needed between Locations and Equipment. Each PM Schedule must have either Equipment or Locations selected.
- **Task Code / Inspection**- This provides a list of predefined Task Codes or predefined Inspections. Selecting an item from this Drop Down list causes all of the details from that Task Code or Inspection to be brought into the Schedule. Users may, however, elect to define the Description of Work in the PM Schedule without choosing a Task Code.
- **Issuing Department** - The department that is requesting the work to be done.
- **Repairing Department** - The department that will be assigned the work.
- **Trade** - The trade that will be assigned the work.
- **Assigned To** - The person that will be assigned the work.
- **Output** – Where the Work Request will dispatch to
- **User Defined Fields (3)** – Special property defined fields to allow sorting and searching.
- **Estimated Time** - The amount of time allotted for the work. Useful in employee accounting reports.
- **Priority / Filter** - The Priority if use, or Filter for reporting purposes. Using a filter on the PM's or Task Codes allows a group of items with the same filter to be pulled for reports.

Questions / Task Tab:



The screenshot shows a software window titled "PM Schedule - [New Schedule]". The window has a menu bar with "Work Definition", "Questions / Tasks", "Schedule", and "Connection". The "Questions / Tasks" tab is active. Below the menu bar, there is a label "Description:" followed by a large, empty text area for entering a description. At the bottom of the window, there are three buttons: "+ Add", "Save", and "Cancel".

- **Description** - The description of the task code or inspection or a free form data entry area with no limits..

Schedule Tab:

- **Auto-Schedule for Best Fit** – This option will disable the schedule defined in the selected weeks at the bottom of the form and automatically schedule the work to best fit the maintenance Schedules of other items. If there are 1000 guestrooms and the filters need to be changed annually; Users would not want to perform this maintenance in one day at the same time each year. By placing a check mark in this box, any overlapping in scheduling can be eliminated. This will force SynergyMMS to calculate the best fitting schedule for these devices. In our example, SynergyMMS will automatically schedule changing the filters in 19 rooms per week, repeated each year.

- **Schedule Mode** –

Regular – WR are generated based on the Start date and the Frequency. If an existing WR exists for the PM, a new WR/PM will not be generated until the original is completed.

For example, if the PM is scheduled for monthly and generated on August 8, and was not yet completed, then no other WR/PM's will generate the next month until the original is completed.

Absolute – WR are generated based on the Start date and frequency. Absolute PM's generate regardless of whether there is an open WR/PM for the same PM.

For example, if the PM is scheduled for monthly and generated August 8. Regardless of the status of this WR/PM each month on the 8th a new WR/PM will generate.

Sliding – WR are generated based on the Start date and the Frequency, like with Regular. However, subsequent WR are generated based on the Completed date of the previous WR/PM. Sliding mode allows for Schedules to be generated on exactly the selected frequency period based on when the PM was last completed.

For example, if a PM is scheduled for monthly and generated August 1 but was not completed until the 8th of the month, it will not be generated again before the 8th of the next month, even if the PM was scheduled to start on the 1st of the month. If the WR/PM was not closed, a new WR/PM will not generate.

- **Frequency** - How often the maintenance is to be done. Choose a time period between Weekly and Annual.

- **Run Hours / Threshold** – Depending if you have selected Locations or Equipment SynergyMMS can calculate PM's based on the number of hours a piece of equipment operates, or the number of sales a room has. Just like keeping track of the mileage on a car to schedule an oil change or rotate the tires, this feature will schedule the maintenance to be performed on equipment based on its operation by hours of usage.

If your facility uses Systems Associates' ControllQ Building Automation System, it will automatically calculate the run hours of your equipment for this field. However, SynergyMMS must be attached to the CIQ BAS to collect this information. We also offer an interface to some PMS / Front Office System to record number of sales for rooms.

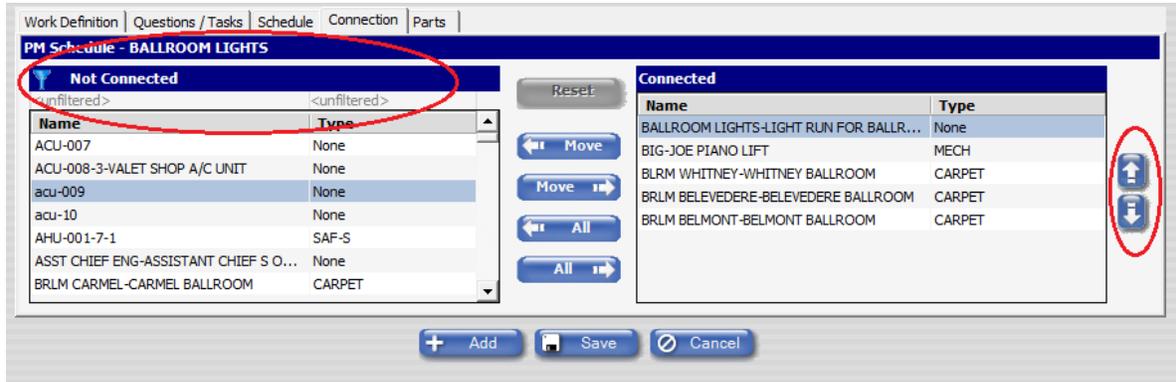
- **Start Date** - Along with the frequency, Users can specific date to start a PM. This allows set up of the system with a pre determined start date for use. This also allows rooms to be put back into SynergyMMS after being remodeled with new dates.

Start Time – SynergyMMS also allows for a start time. Users can set a specific time of day to start a PM. This allows SynergyMMS to do shift style PM's.

- **Repeat every** - Users can also specify if a PM is not due every year how often it should be looked at an evaluated.

Note: If a start date is set as 2/25/2008 which is a Monday, but the Day of week is set to Sunday the PM will generate on the first Sunday after the start date, which will be Sunday 3/2/2008.

Connection Tab:



Before Connecting Equipment or Rooms to a PM Schedule, Users should have already:

- Added all Equipment or Rooms to SynergyMMS.
- Selected either Equipment or Room Association on the Schedule tab.

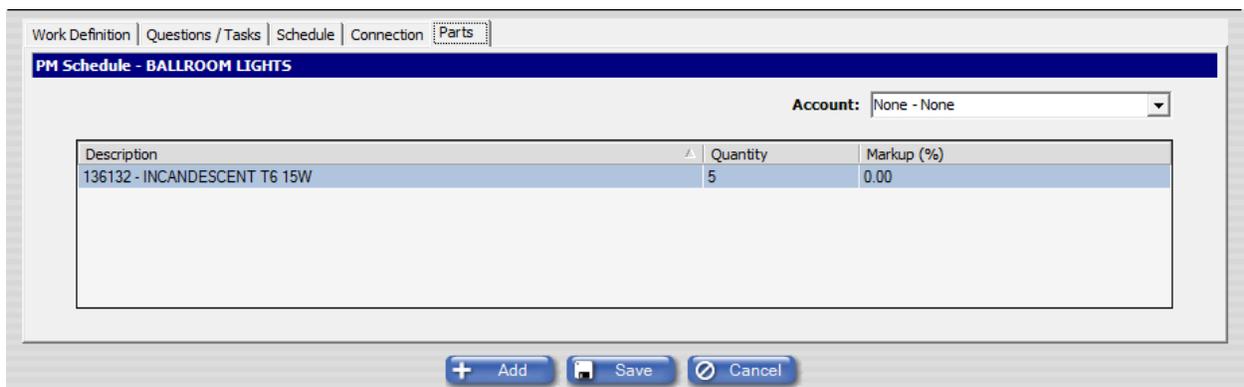
To Connect a PM Schedule:

1. Click the Connection tab.
2. On the left side of the screen, select the item then click the Move button.

The Blue funnel available on the 'Not connected' side that can be used to search for a particular item or the item type.

Arrows on the right side of the 'Connected' side can be used to force and order to how the connected items will generate.

PM Parts Tab:



The Parts tab is available for properties that have the Costing / Inventory module of SynergyMMS (For more details contact SAI).

Parts can be added by right clicking in the Parts are and then choosing to add or edit.

SAI recognizes that not all Rooms or Equipment are alike. In those cases, first define generic areas then define the specifics. For example, out of 1000 guestrooms, four are suites that receive HVAC from a larger air handler. It is possible to set up two PM schedules indicating:

Change Guest Room Filters (Associated with 996 rooms)

Change Suite HVAC Filters (Associated with 4 rooms)

However, each of these two types of rooms may still share other PM schedules like:

Guest Room – Deep Cleaning
Guest Room – Rotate the mattress
Guest Room – Semi Annual Inspection

Through careful planning, thousands of Rooms and pieces of Equipment can share a small number of PM Schedules.



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