

FAMIS: Make Routes

1 Explanation of Routes

- 1.1 A Route is just a collection of related equipment. I can be multiple equipment (EQ's) of the same type in a single building or it may be the same type of equipment in multiple building. Pre-planning is required for routes. Things to consider:
- Crafts: how many different craftsmen are needed to complete route, is there a secondary crew along with the primary.
 - Estimated Time: What is the time limit on any given route? Guidance over the past few years has been to keep the route under 2 days worth of work. In that way, craftsmen can get the PM work done reasonably in week considering other trouble tickets that may come up.
 - Path of work: Literally taken, a route is a map of work. The route can literally be the path of an inspection. What happens 1st, 2nd, 3rd, etc. On a building with 20 floor inspecting 50 eyewash stations should be laid out so that walking is minimized. If a large equipment assembly with multiple components, the procedure on a route may need to be broken up by craft or by schedule so that work happens in a progression.
- 1.2 This procedure must be considered in its entirety. Missing any piece can wreck havoc in the shop. There are two sections for properly creating a route. Both sections must be completed, or the result is multiple work orders for the same equipment may result.
- 1.2.1 Creating the Route
- 1.2.2 Preparing the Equipment Records.

2 Create the Route.

- 2.1 Plan your routes on paper or Excel first.
- 2.1.1 Determine the route ID and description, PM and list of equipment IDs.
- 2.1.1.1 To figure out the next Route ID#, see [Step 2.4.2. \(See this bookmark\)](#)
- 2.1.2 Estimate the man-hours associated with the route.
- 2.1.2.1 Keep it under 2 days worth of work to be completed during 1 week. Look for specific direction from your supervisor.
- 2.1.2.2 It may be necessary to have multiple routes to spread the work over a period of time.
- 2.1.3 Give the route a reference number: note, you only 1 chance at this, once it is create/saved, a request to FAMISHelp is required to delete. Plan ahead for this ID number.
- 2.1.4 Example format:
- 2.1.4.1 Route ID: this will be in the following format: RTE0000000.
- 2.1.4.2 Nomenclature: Building abbreviation: Name of equipment, frequency, description of PM. Recommend keeping the frequency simple and easy to understand. Consider the confusion of bi-annual and semi-annual; just call it 2 times per year (or 2X year).

Proposed route ID	Nomenclature
RTE000001	MAI: AHU01 (2X YEAR) COOLING COIL CLEANING & INSPECTION
RTE000002	MAI: AHU01 (2X YEAR) HEATING COIL CLEANING & INSPECTION

2.2 The following is what the route looks like in FAMIS with the key fields identified.

2.2.1 Equipment Route Dialogue box.

Reference number: RTE0000XX

Title of the route: Bldg: EquipmentID (freq) abbreviated title of PM.

Equipment that is on the route are listed

Equipment	Nomenclature	Site	Building	Order
EQ051998	LIGHT EMRG-RM. 18.202A (1 OF 13)	UTM	0116	50
EQ051999	LIGHT EMRG-RM. 18.202A (2 OF 13)	UTM	0116	51
EQ052000	LIGHT EMRG-RM. 18.202A (3 OF 13)	UTM	0116	52
EQ052001	LIGHT EMRG-RM. 18.202A (4 OF 13)	UTM	0116	53
EQ052002	LIGHT EMRG-RM. 18.202A (5 OF 13)	UTM	0116	54
EQ052003	LIGHT EMRG-RM. 18.202A (6 OF 13)	UTM	0116	55
EQ052004	LIGHT EMRG-RM. 18.202A (7 OF 13)	UTM	0116	56
EQ052005	LIGHT EMRG-RM. 18.202A (8 OF 13)	UTM	0116	57
EQ052006	LIGHT EMRG-RM. 18.202A (9 OF 13)	UTM	0116	58
EQ052007	LIGHT EMRG-RM. 18.202A (10 OF 13)	UTM	0116	59

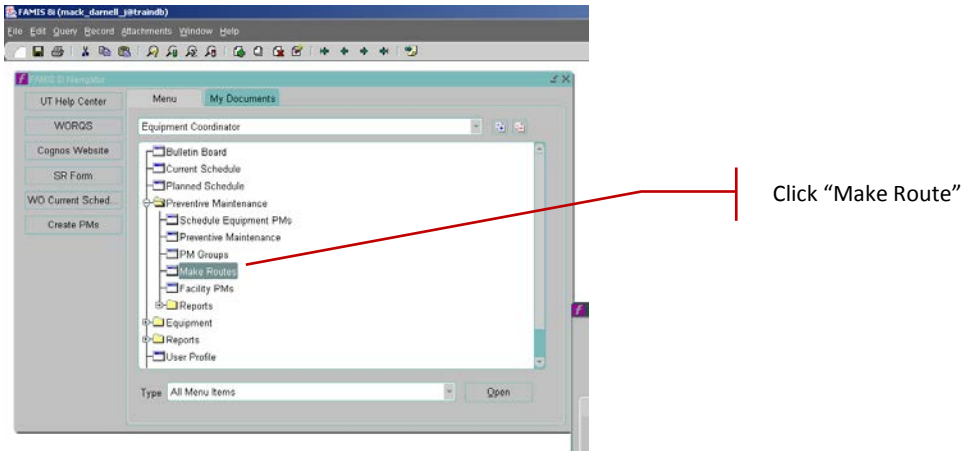
Order determines how the equipment is listed on the work order or a report.

2.2.2 Preventative Maintenance tab

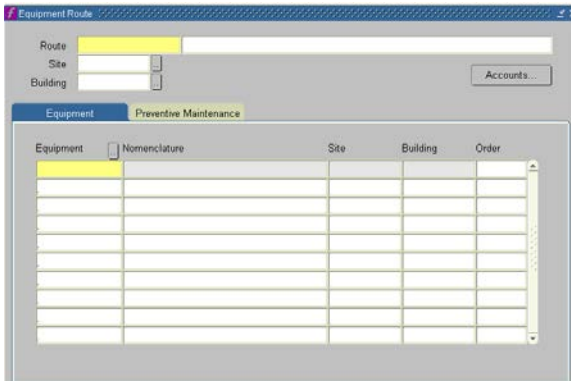
1. PM Number and the nomenclature of the PM task list.
2. Next Due Date: This is the date of the next PM. This date can be modified.
3. Active check box: do not uncheck this unless some discussion occurs. It can cause data integrity issue.
4. Actual: (not sure how and if this is really used or what it means)

2.3 Open the make route dialogue box in FAMIS.


2.3.1 Open under role - Equipment coordinator. Click “make route.”




Your screen will look like the following:



2.4 Route ID:

2.4.1 Query for the last Route#, by using “RTE%” and hit the last record button, . This is not an automatic assignment in FAMIS yet.

2.4.2 Insert a new record by clicking the insert button, . This brings up a blank route form.

2.4.3 Put in the next Route ID number. Then tab to the route name.

2.4.3.1 Once this number is created, it cannot be deleted. If you have any issues, please just send an email to worqs@austin.utexas.edu. They can easily delete that Route ID in error. Put “DELETE” in the Route name.

2.4.4 Tab to the next field to input the Nomenclature. This was determined in the first step:

- Route Id = RTE00001
- Route Name / Nomenclature = DPI: DAILY HARDNESS AND CONDUCTIVITY TEST

2.4.5 Site = UTM, or as applicable.

2.4.6 Building = enter the abbreviation or the building number. Either will work.

2.5 Load the equipment records into the route.

2.5.1 Click into the Equipment field, type in the equipment id number that will be on the route.

2.5.2 Hit the tab key

2.5.2.1 FAMIS will auto-fill the equipment name

2.5.2.2 FAMIS goes to the next Equipment field ready for entering the next EQ ID.

2.5.3 Continue until all are in the Route. If you are working from an excel file, it is possible to copy-paste from Excel to FAMIS in this field. Control-C / Control-V

Equipment	Nomenclature	Site	Building	Order
EQ057100	DET-PULL: ZONE 1-1 RM 100	UTM	0435	1
EQ057101	DET-PULL: ZONE 1-2 RM 106	UTM	0435	1

Click into this field and type in the EQ#.
Hit the tab key to go to the next

Order the equipment will be printed on the work order.

Warnings: If there are any duplicate numbers, this screen will error out when you try to go to the next tab. You'll have to scan thru the list to find the duplicate. FAMIS seems to also put the cursor at the 2nd listing of a number, but I have not found that to be consistent.

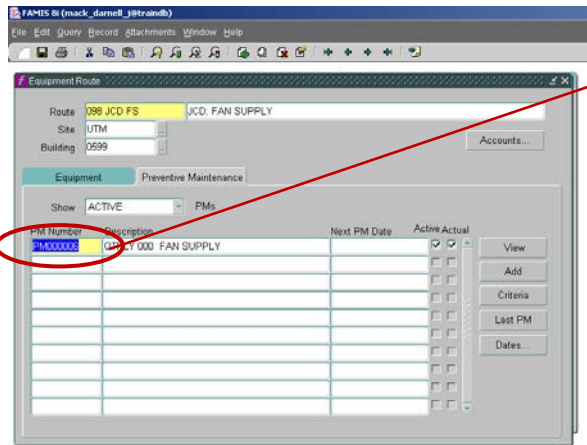
2.5.4 Order¹: Placing the order of equipment can make the techs path from top to bottom of building much easier and methodical. This order number is auto-filled as the equipment is entered. However, this can be altered by clicking into the order field.

¹ **Order Field:** Whole number that determines how equipment is ranked for display on forms and in reports; default is previous number plus 1, but value can be edited. If two or more items are assigned the same value, they will be displayed in alpha-numeric order by Equipment ID.

2.6 Add the PM Instruction

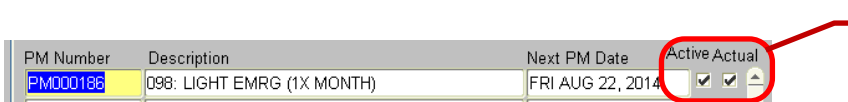
2.6.1 Add the PM Number. Creating the PM is done in a different screen.

2.6.1.1 Just type in the number and hit tab or enter and it will fill in the description.



Add PM number. Type the PM number in the field and hit "tab." It auto-fills the

2.6.2 The two radio buttons should be left at their defaults: Active² and Actual³ Check boxes:



Radio buttons for "active" and "actual."

² **Active checkbox:** from FAMIS Help Manual.

This function enables the user to identify an active equipment/PM association even if the Next PM date field is blank. A blank Next PM field may indicate that the PM association has been suspended, or that the setup is in progress and the date has not been entered yet. A check in this box indicates that the PM listed to the left is active, regardless of whether or not there is a date in the Next PM field. The checkbox defaults to Active.

When a user checks this box, the system will determine:

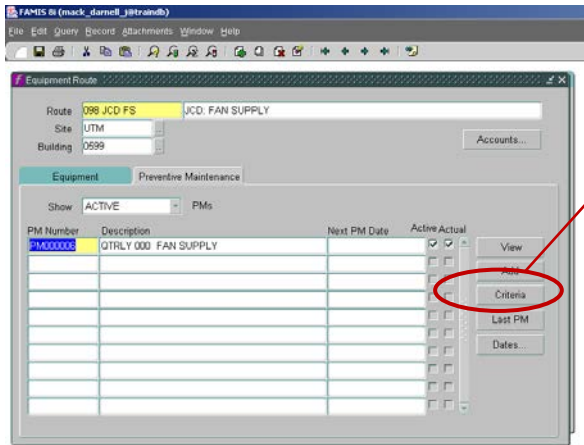
- if the equipment is active. If the equipment is not active, the system will display the following alert, "This equipment is inactive and won't be included in the PM Schedule. Are you sure you want to flag this record as 'Active?' "
- if the PM is active. If the PM is not active, the system will alert the user, "This PM Procedure is inactive and won't be included in the PM Schedule. Are you sure you want to flag this record as "Active?"

When a user unchecks the active box, the system will clear the Next PM date after confirmation by the user. Prior to scheduling Equipment PMs and Equipment PM Routes, the system will verify that the equipment and PM associated with it are both active.

³ **Actual Checkbox:** Unable to find any documentation in FAMIS about how this is used or defined.

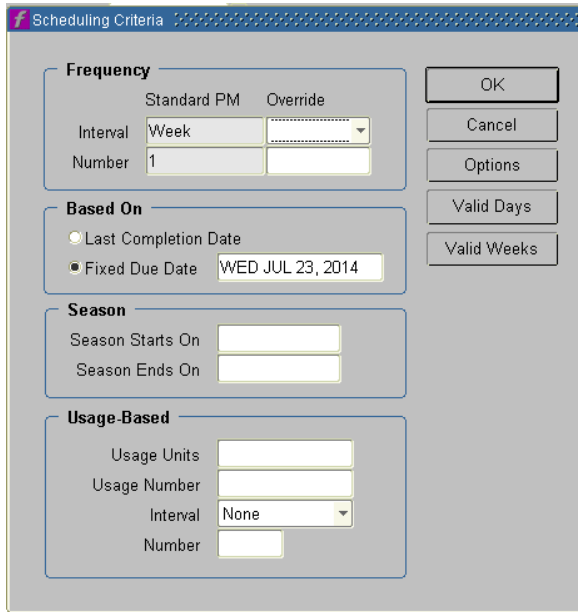
3 PM Criteria Options:

3.1 Click on the criteria button.

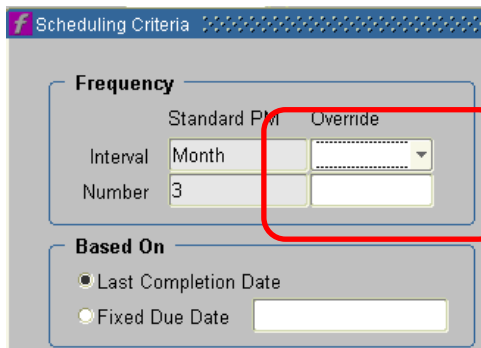


Click Criteria button.

3.2 Screen will look like this:



3.2.1 Check the Frequency interval and number to see if it is correct.



Verify the interval and number. If needed, change.

3.2.2 Based on: the PM is based on critical information.

- Click the RADIAL BUTTON⁴ for “fixed due date.”
- Insert a FIXED DUE DATE⁵.

CAUTION: this is a critical field to use. This fixed the PM date on a 3 month frequency. If this is based on the last completion date, the PM can easily get out of sequence. For a PM that should have been every 3 months or 4 times per year, the last completion date could allow it to “walk” or become only 2 times per year.

Click the radial button, “on”
Enter the Fixed due date.

4 Add the Route Account Information.

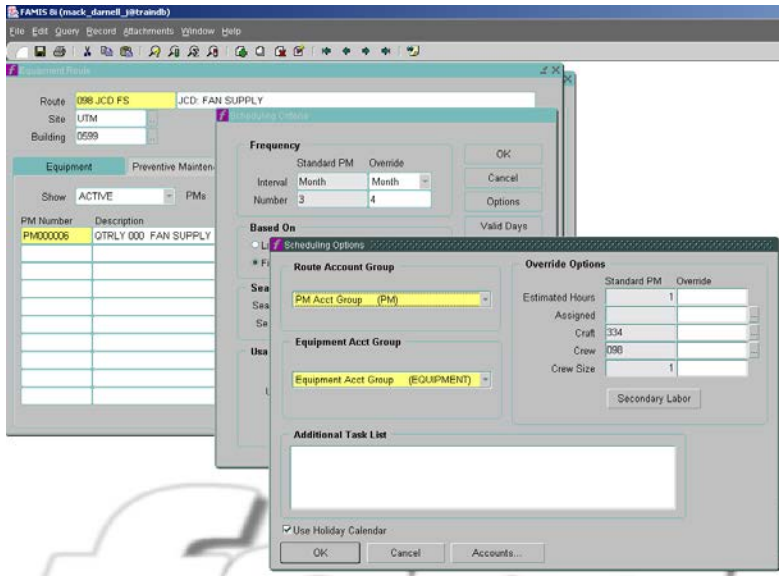
4.1 Click “options.”

Click Options. This takes you to the place to update the account and PM information

Your screen will look like the following:

⁴ **Fixed Due Date Radio Button:** If the next scheduled PM is based on a fixed due date, regardless of when the last PM was completed, check this item.

⁵ **Fixed Due Date:** If the next scheduled PM is based on a fixed due date, regardless of when the last PM was completed, select this item.



4.2 Account Info

4.2.1 Always select the following combination. This is important for business financial reasons. It forces the labor and material charges to be applied correctly to the equipment and no where else. Use the pull-down menu, and select the following:



Route Account Group

PM Acct Group (PM)

Click selection for pull-down menu.
Then select PM Account group (PM)

Equipment Acct Group

Equipment Acct Group (EQUIPMENT)

Click selection for pull-down menu
Select Equipment Acct Group (EQUIPMENT)

4.3 Add or Check the Override options for hours to complete the work Information and who is assigned

4.3.1 View the Override Options:

Override Options

	Standard PM	Override
Estimated Hours	.25	
Assigned		...
Craft		...
Crew		...
Crew Size	1	

Freeze Estimate?

Secondary Labor

4.3.2 Estimated hours.

Here is your chance to modify the estimated time based on an entire route. Original estimate is based only on a count of equipment. PM initially setup as a generic. Some buildings may be very different, override as needed or create a specific PM for that building.

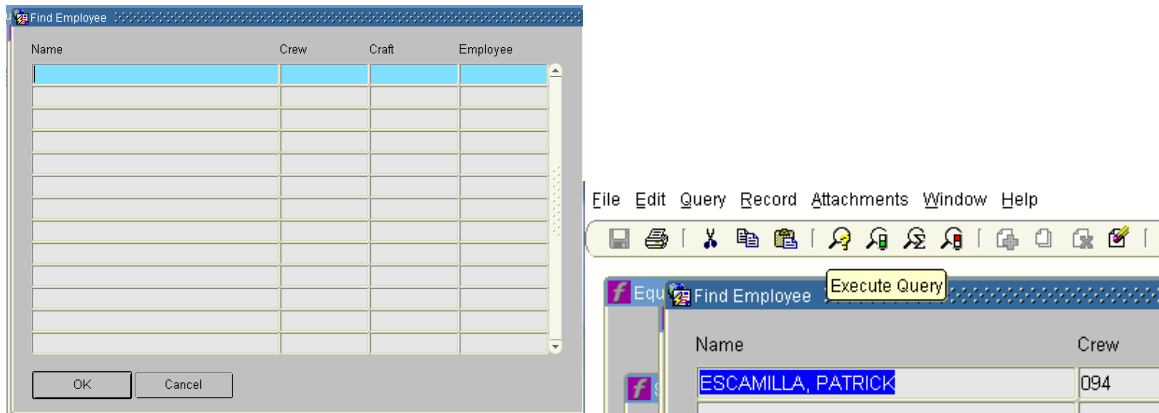
It is recommended that the total hours for a route be something less than 16 hours total. Supervisor may decide that it should be something much less for this route ONLY.

Example: A route for Exhaust fans has 11 pieces of equipment. PM says it takes ½ hour to complete the work. PM's are setup on a single equipment basis. Therefore, 11 X ½ hour, or 11 x .5 = 5.5 hours. The entire route will take 5.5 hours. However, you've done this work on the building and know from experience that it really takes 4 hours and not that much if you were really focused. Your override would be 4 hours.

4.3.3 Assigned to:

4.3.3.1 Enter the employee's number in the blank, or

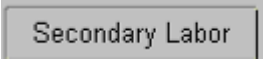
4.3.3.2 If you don't know the employees number, click the snake eyes in the assigned section. It brings up this menu. Search on employee's last name by %ESCAMILLA%, execute the query by selecting

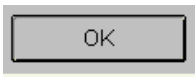


4.3.4 Craft: Enter the craft name, click on the snake eyes for the list of values or go to the link, http://www.utexas.edu/campusplanning/informationmgmt/apps_fac_lookup.php?case=27

4.3.5 Crew: Enter the crew number.

4.3.6 Secondary Crew: If secondary crews are required for this work, add them at this time by clicking the

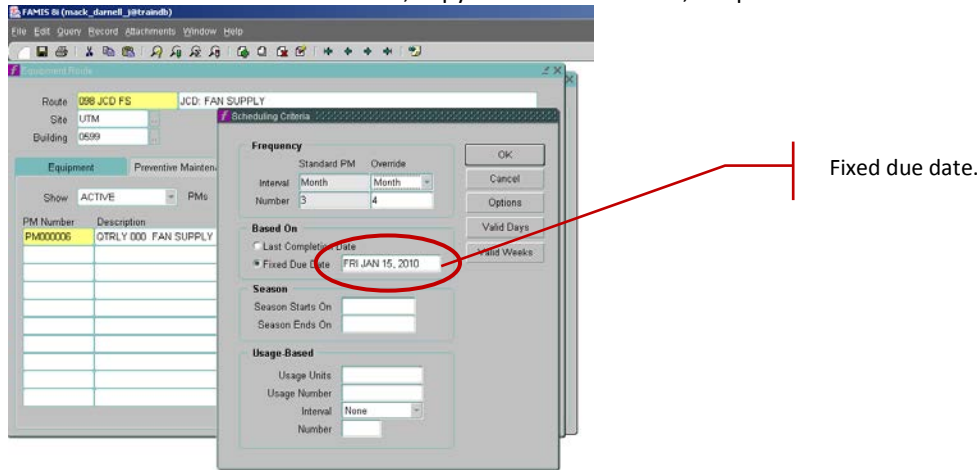
button, . Follow the normal process for entry of secondary crews.

4.3.7 Click OK button, .

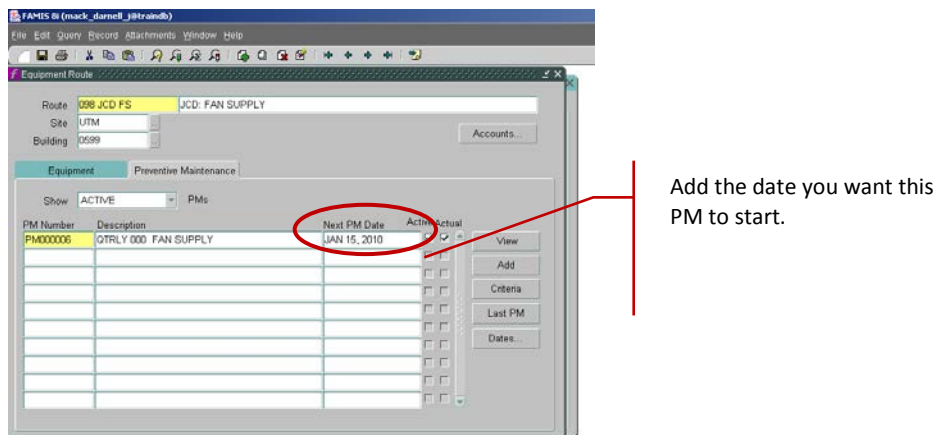
Warnings: if the account info is not already completed for any of the individual EQ#, then you will not be able to proceed past this point. You'll have to go back to the EQ, add the account numbers and come back to the route.

5 Starting the PM Route by the next PM Date

5.1 To start a PM Route for the first time, copy the “fixed due date,” as per below.



5.2 Then paste, or type in the “next PM date.” This actually starts the PM. If there is no date, then PM will never start, it just hangs out there in limbo.



Caution: Make sure it is a realistic start date at some point in future, tomorrow, next week, quarter, year, etc. A date in the past will result in multiple work orders based on that frequency. FAMIS attempts to catch up on the PMs. Example: if you miss type the year 2014 for year 0214 for a quarterly PM, then FAMIS will spawn multiple work orders from the year 0214. (equation: #work orders = (2014-0214) x 3 = 5400 work orders)

You are now done with the PM Routes! Now on to the next section. Don't skip it. It will bite if you don't.

6 Editing the EQ's for Routes ((Eliminating Duplicate PMs)):

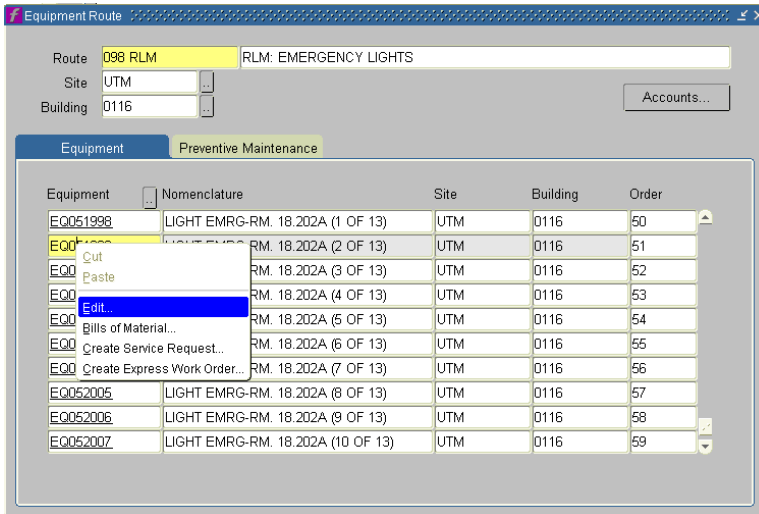
The warrants some explanation – checking the equipment records is key to making it a success. You have to check the EQ's by some method to make sure there isn't a PM on the equipment record. If you don't, the equipment PM and the Route PM will kick out, resulting in duplicate PMs, double the man-hours, etc.

There are multiple ways to do this. Where you do it is irrelevant, how you do it is critical. I do it after I create the route. I use the route list of equipment as my checklist. Start at the top and work down. Others will print the list or work from excel to achieve the same results.

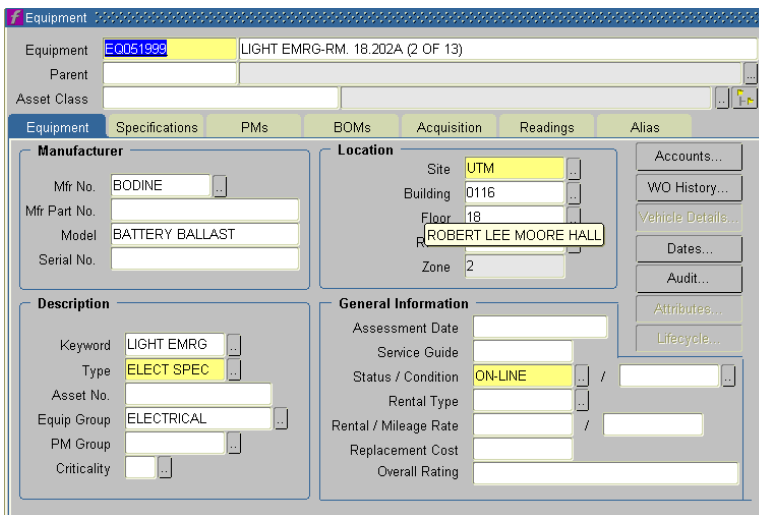
6.1 Pull up the Equipment Record, the EQ#. As example, from the route,

6.1.1 Right mouse click on the EQ#. See the screen blow.

6.1.2 Click “edit.”

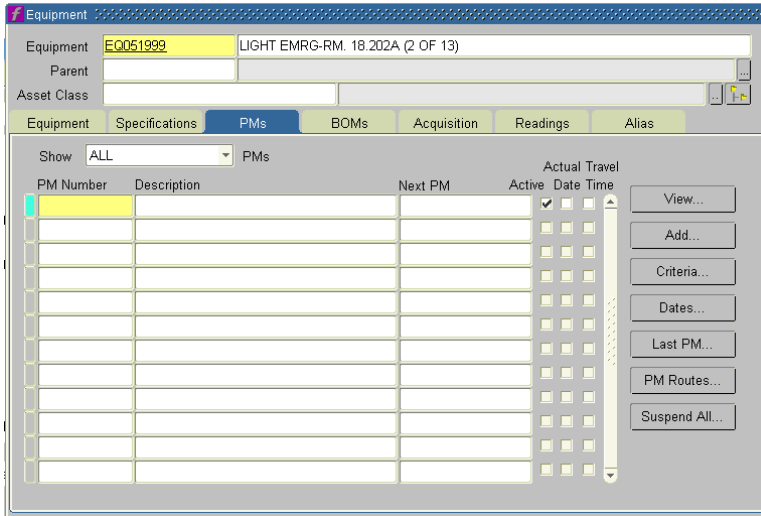


6.1.3 Your screen should now be the equipment record you've selected.



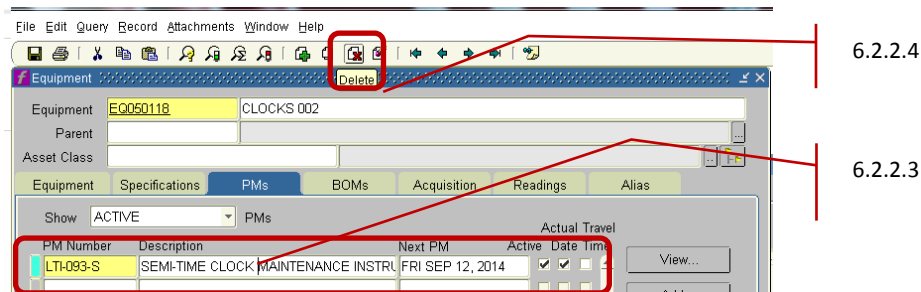
6.2 Here's how you remove duplicate PM's, extra printed info, double man-hours by completing the following:

6.2.1 Click on the PM Tab. It should be empty of PM's. If it is NOT, proceed to next step




6.2.2 Follow the procedure for deleting PMs from equipment,

6.2.2.1 Verify this is the correct equipment



6.2.2.2 Verify this is the same PM task that is duplicated in the route.

6.2.2.3 Place cursor in the PM title.

6.2.2.4 Click the red X, .

6.2.2.5 Verify this is on the route by clicking the PM Routes... button,

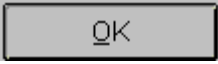
PM Routes...

The screenshot shows the 'Equipment' window with the 'PMs' tab selected. The 'Show' dropdown is set to 'ACTIVE'. A table lists PMs with columns for PM Number, Description, Next PM, Active, and Date Time. A 'PM Routes...' button is highlighted with a red box and labeled 'PM Route Button' with a red arrow. Below the main window, a 'PM Routes' dialog box is open, showing a table with columns: Route, PM Number, Next PM, Number, and Interval. The first row contains: 098 RLM FR, PM00053, FRI OCT 3, 2014, 4, and M.

Route	PM Number	Next PM	Number	Interval
098 RLM FR	PM00053	FRI OCT 3, 2014	4	M

6.2.2.6 Add/modify an equipment note on the record such as the following. Recommend removing the check for the "Print on Work Order Ticket." This is just for future reference and would not help the techs in the field.

The screenshot shows the 'New Note' dialog box. The 'Title' field contains 'EQUIPMENT INFORMATION'. The 'Text' field contains: 'PM HAS BEEN REMOVED FROM EQUIPMENT RECORD ON PUT ON THE ROUTE, 0098 RLM FR. -- DJSM, 7-17-2014'. There are checkboxes for 'Print on Work Order Ticket' (unchecked) and 'Private Note' (unchecked). There are input fields for 'Note Date', 'User', and 'Source'. 'OK' and 'Cancel' buttons are at the bottom.

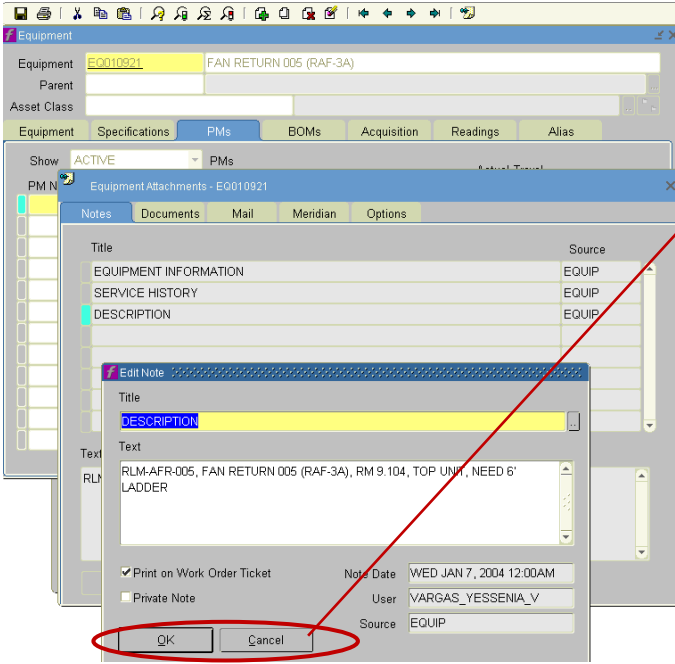


6.2.2.7 Click “ok” button, , to save your work.

6.2.2.8 Deciding what to print on the PM Route?

Whatever is printed on the regular PM will also be printed on the route for each EQ# on the PM Route list. This can result in a large stack of paper which may or may not be needed. Go into the following screen to click off what is not needed.

If there is a long service history for a period of years, consider splitting up the list. “Cut” the most recent year’s info from the service history; add a new attachment for that year’s data only. Click the old one “off” and click “on” the most current information. This will print only the most recent, needed info only.



Click this “off” for those information that you do not want printed on the PM Route.

----- End of Procedure -----