



Planned Maintenance System Software Manual



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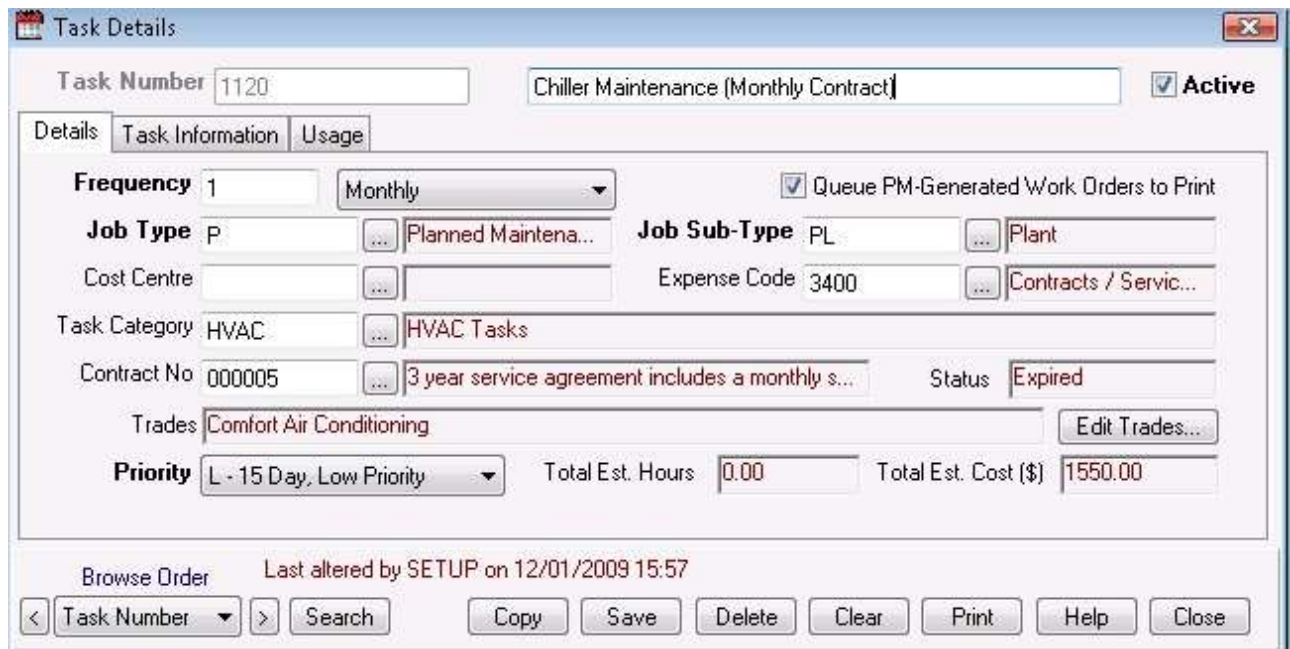
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OVERVIEW

The *Planned Maintenance System* is used to prepare a maintenance plan for scheduled preventive maintenance. Functions include the preparation of maintenance tasks, allocation of tasks to assets, scheduling of the frequency, trade and estimated costs into the maintenance plan and the generation of PM Work Orders to be printed from the Work Order System.

FUNCTIONS

Task Details



Description of screen

The Task Details tab is for adding a new task, and to view, copy, modify or delete an existing task. This allows you create work instructions for one or more trades to complete.

Tasks can be used for both planned maintenance and adhoc work orders. Task details include a description, frequency interval/type, job type/sub type, cost centre, expense code, task category, contract No., trades, priority, estimated time/costs.

For PM work orders, the task information will be printed as extra text when the maintenance plan is generated from the *Generate PM Work Orders* screen.

A task can be assigned directly to an ad-hoc work order using the *Task Number* field in the *Work Order Details* screen. If this option is selected the frequency type and interval of the task are ignored. The task will default the following details, job type/sub type, priority, trades, estimated time/costs if entered and the task information if entered.

Note: *This can be used to define tasks for repetitive work request such as, lamp replacement, fixing of dripping taps or replacing broken glass.*

Alternatively a task can be assigned directly to an ad-hoc work order using the *Task Number* field in the *Work Order Details, Extra Text tab*. This option will default the task information only as the extra text.

For example: 6 Monthly Water Tank Inspection

The plumber will:

1. Shut down and isolate water tank.
2. Clean and replace water filter.
3. Clean main tank.
4. Fill tank and bring on-line.

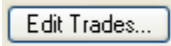
Fields

- Task Number** This is a mandatory field for the unique number used to identify a task.
- Short Description** This is a mandatory field for a short description of the task. This is shown on the second line of the work order description on the work order slip, when it is printed.
- Active (checkbox)** This is a checkbox which indicates whether or not the task is active or inactive. If checked then it can be assigned to assets or used on work orders. This field will always default to active.
- Interval (N)** This is a mandatory field for the interval of the frequency for the task. This is used in conjunction with the frequency type, to indicate the PM schedule.

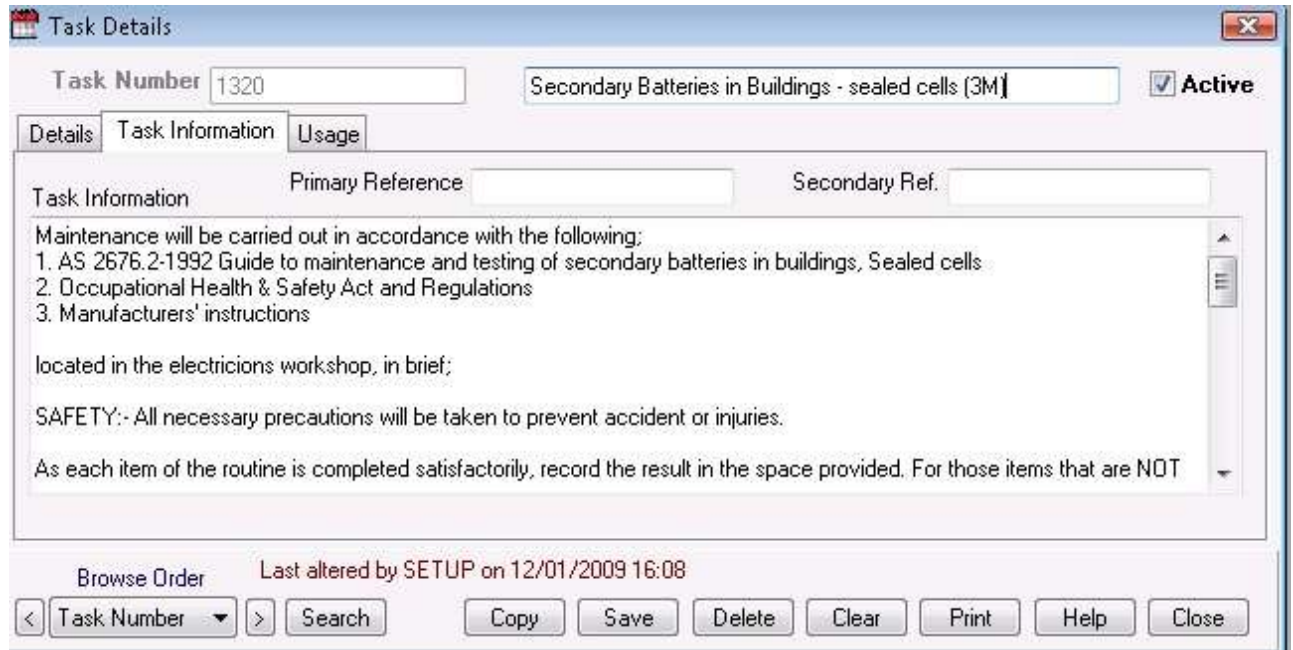
<i>For example:</i>	<i>Schedule</i>	<i>Frequency Type</i>	<i>Interval</i>
Fortnightly	2 weekly	weekly	2
Trimonthly	3 monthly	monthly	3
Annually	1 yearly	yearly	1

Note: *There is no limit to the size of the interval applied to a frequency type, it could be 6 monthly, 5 yearly or 10 yearly.*

Frequency Type	<p>This is a mandatory field for the frequency of the task. The selections include Daily, Weekly, Monthly, Yearly or Once.</p> <ul style="list-style-type: none">Jobs assigned daily or weekly will re-occur on the same day of the week <i>For example:</i> every Tuesday.Job assigned monthly, yearly or once will re-occur on the same date <i>For example:</i> the 15th of the month. <p>This field is used in conjunction with the Interval to define the frequency the job is scheduled to occur in the maintenance plan schedule.</p> <p>Note: <i>If using the task for adhoc work orders only and not for planned maintenance then this field needs to be selected but it is not used on the work order.</i></p>
Job Type	<p>This is a mandatory field for the job type allocated to the task</p> <p>This can be modified in the <i>Assign Asset to Task, Maintenance Plan or Work Order Details</i> screens if required.</p>
Job Sub Type	<p>This is a mandatory field for the job sub-type.</p> <p>Note: <i>If the Job Sub Type has not been selected in the System Control screen then, this field will not be visible on the screen.</i></p>
Cost Centre	<p>The Cost Centre Code is generally related to the organisations general ledger and used for financial reporting purposes. Cost centres are used in job costing and asset financial details, and in conjunction with the expense codes can accurately reflect the organisations financial requirements.</p>
Expense Code	<p>The expense code is generally related to the organisations general ledger and used for financial reporting purposes. Expense codes are used for job costing, and in conjunction with the cost centres can accurately reflect the organisations financial requirements by a further breakdown of the cost centre.</p>
Task Category	<p>Tasks are categorised to group them together into work tasks such as Planned maintenance tasks, ad-hoc breakdown tasks and customer service tasks.</p>

Contract No.	If the task is covered in a contract agreement the contract number is reference to the contract. This number is used by BEIMS and IS NOT necessarily the contract number from the supplier. A contract number can be system generated.
Status	This is a display field only for the current Status of the contract, either Current or Expired.
Trades	This is a display field for all the trades allocated to the task.
 Button	Click on this button to call up the Trades screen which enables you to add a new, or to view, modify or delete existing trades on the task. Each Trade can have estimated hours to complete and estimated cost details entered. These are then totaled and displayed on the task.
Priority	This is a mandatory field for the priority of the task. Select one from the list supplied.
Total Estimated Hours	This is a display field for the Total Estimated Hours of all the trades allocated to the task. This is the information displayed if View - Total estimated time, is selected in the <i>Maintenance Plan</i> screen.
Total Estimated Cost	This is a display field for the Total Estimated Cost of all the trades allocated to the task. This is useful for budget forecast reports on estimated costs for the maintenance plan.

Task information Tab



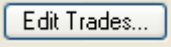
Description of screen

- | | |
|---------------------|--|
| Task Information | This is an optional field for the detailed instructions of the task to be performed, and is a free text area of unlimited size. Text can be copied to this area from the windows clipboard or from other applications. |
| Primary Reference | This field is used to identify the primary reference source such as Australian Standards, Building Control Commission and the Manufactures instructions. |
| Secondary Reference | This field is used to identify the secondary reference source such as Australian Standards, Building Control Commission and the Manufactures instructions. |

Note: This is for TEXT only. Line drawing, Symbols, Tables and Text formatting from other applications will not copy to this screen.

How to Manage Tasks

Add Enter in the new task number, then press <Tab> then, the task description and <Tab>.

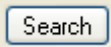

Enter in the interval/frequency, job type/sub type and priority details then click on the  button to allocate trades and estimated trade times and costs.

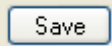
Note: *each task must have at least one trade code allocated to it.*

Next enter in the task information into the memo field. Text can be cut or copied and pasted from the windows clipboard, to this field.

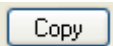
When complete, click on the  button in the *Instrument Panel*.

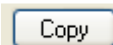
View Enter or select the task number then, <Tab>. The Task details will now be displayed. Scroll up or down to see the full task information.

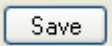
To search for a task, click on the  button on the instrument panel. To browse through existing tasks, click on the  browse buttons.

Modify View the task to be modified. Modify the details as required, then click on the  button.

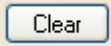
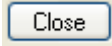
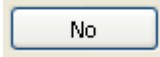
Note: *Changing the interval/frequency type in this screen will not alter the related asset/task combination in the plan.*

 If there is a need to modify an existing task you can copy the existing task to a new task number, modify the frequency/interval and other details then, save the changes.

Copying a Task View the task to be copied. Click on the  button in the *Instrument Panel*.

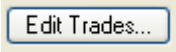
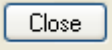
Now type in the new task number in the *Task Number* field then, <Tab>, modify the details as required then, click on the  button to save the record.

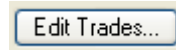
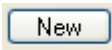
The task will be saved and the cursor returned to the *Task Number* field for you to create another copy.

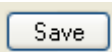
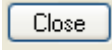
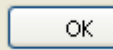
If you are finished, click on the  or  button then,  to save the record.

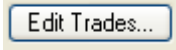
Trade Code	This is a mandatory field for the trade to be assigned.
Description	This is a display field for the trade description of the trade code allocated.
Est. Hours (N)	This is an optional field for the total of the estimated hours for each trade allocated. This is then totalled for all trades and the total estimated costs shown in the task details screen which is then defaulted to the work order. <i>Note: By entering estimated times, time commitment reports can be run to better track your overall resource commitments for the plan. Or view the resource commitments of the maintenance plan in a calendar on the screen.</i>
Est. Cost (\$)	This is an optional field for the total of the estimated cost for the trade allocated. This is then totalled for all trades and total estimated costs shown in the task details screen which is then defaulted to the work order. <i>Note: The cost is not automatically calculated using the tradesperson rates. If estimated costs are entered, reports to provide budget estimates for future Planned Maintenance costs can be run.</i>

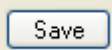
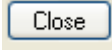
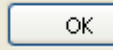
How to Edit Trades

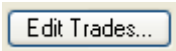
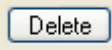
View View the task required then, click on the  button. View the information as required then, click on  button to return to the original screen.

Add View the task required then, click on the  button. Click on the  button, enter or select the trade then, <Tab>. If required enter the total of the estimated hours and estimated cost.

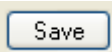
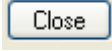
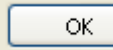
Click on the  to save the record and return to enter additional trades. Or click on the  button then, click on the  button to save the record and return to the original screen.

Modify View the task required then, click on the  button. Modify the details as required.

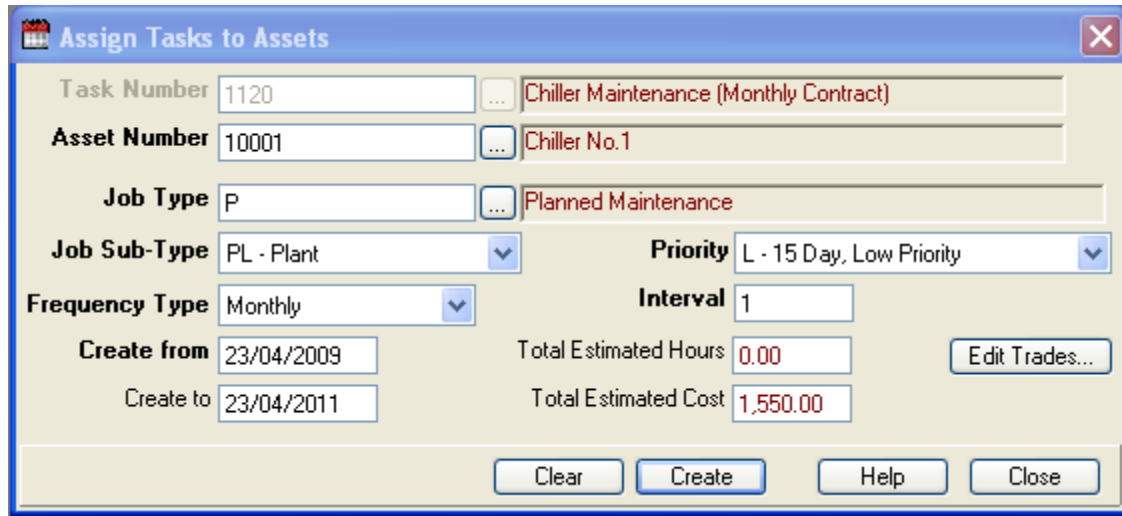
Click on the  to save the record and return to enter additional trades. Or click on the  button then, click on the  button to save the record and return to the original screen.

Delete View the task required then, click on the  button. Select the trade to be deleted, then click on the  button to delete the trade.

Note: *Each task must have at least one trade allocated.*

Click on the  to save the record and return to enter additional trades. Or click on the  button then, click on the  button to save the record and return to the original screen.

Assign Tasks to Assets



Description of screen

The Assign tasks to Assets screen is used for assigning assets to tasks to create a maintenance plan. Once the assets have been assigned and the plan created, the details are viewed, modified or deleted using the *Maintenance Plan* screen.

Note: *Both asset details and task details must exist in BEIMS before using this screen. This screen can not be used to modify or delete information in the plan*

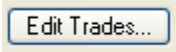
Fields:

Task Number	This is a mandatory field for the number used to identify the task to assign the asset.
Asset Number	This is a mandatory field for the asset number being assigned to the task.
Job Type	This is a mandatory field for the job type of the work being performed. This defaults from the task details screen, however it can be changed if required.
Job Sub Type	This is a mandatory field for the job sub type. This field defaults from the task details screen, however it can be changed if required.
Frequency Type	This is a mandatory field for the frequency of the task. The selections include Daily, Weekly, Monthly, Yearly or Once.

Create from (Date) This is a mandatory field for the date of next occurrence planned for the Asset/Task combination specified. BEIMS will only accept the current date or later when creating the asset/task combination.

Create to (Date) This is an optional field for the last date of occurrence for the above job. If the date is left blank then the system will automatically assign asset/task combinations for the frequency/intervals specified over the entire planned maintenance cycle as defined during the initial setup of BEIMS. This date can be no more than one PM Cycle from the *Create from* date.

Priority This is a mandatory field for the priority of the work and defaults from the task details, however it can be changed if required.

 Button Click on this button to call up the *Trades for Asset...* screen with the trades and their estimates allocated to the task. You can add new or modify existing details for the trades if required.

Note: *Any additions or modifications will only take effect for this Asset/Task combination ie. changes are not saved to the task in the Task Details screen.*

Total Estimated Hours This is a display field for the total estimated hours entered for all trades allocated to this task. This is used in the *Maintenance Plan* screen when the View by Total Estimated Time is selected.

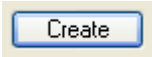
Total Estimated Cost This is a display field for the total estimated cost entered for the job for all trades allocated to this task. This can be used for reporting budget cost estimates for maintenance plan.

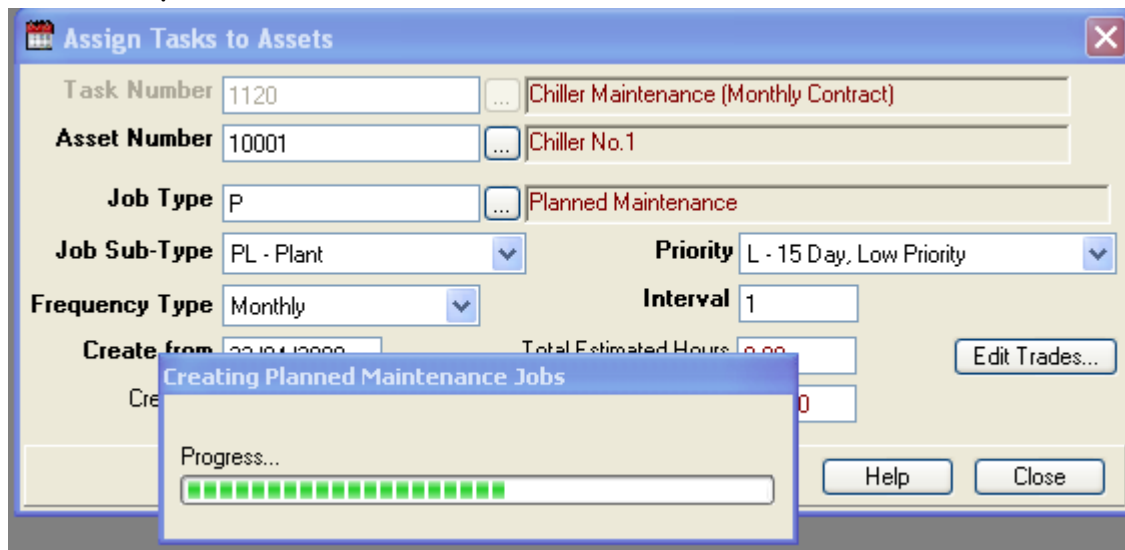
How to Assign Tasks to Assets

Assign Enter or select the task number which you wish to assign the assets to, then <Tab>.

Enter or select the asset, then <Tab>. The job type, sub-type priority and trade will default from the task however, they can be changed if required.

Note: *Any changes made to these fields are for this Asset/Task combination only.*

Enter the *Create from* date to start the job. Now click on the  button to save the details and create the records in the plan



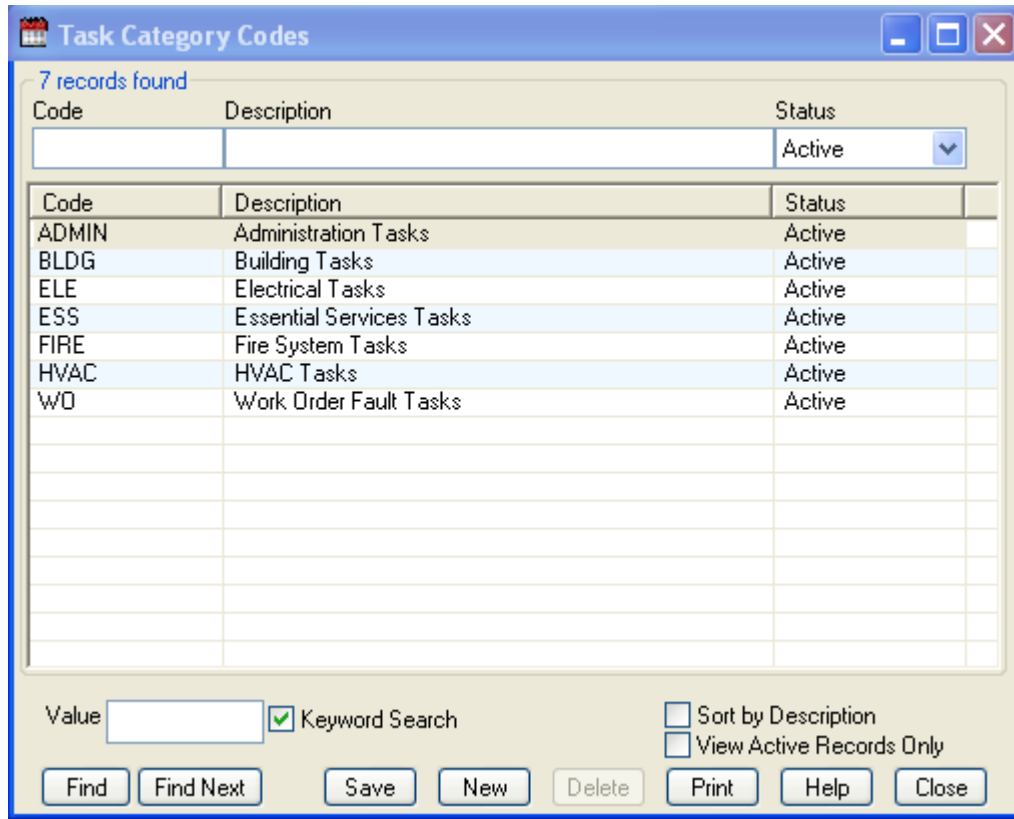
Message displayed during PM Job Creation

If you try to assign assets to tasks and there are already records in the plan for this Asset/Task combination, you will be prompted with a message with the following options:

Message: Planned jobs already exist

- Replace the trade information for existing jobs in the plan, add new jobs, and if dates of new jobs clash with existing jobs, overwrite the old job.
- Don't replace trade information, add new planned jobs, but if dates clash with existing jobs, leave the old job in the plan. This option disregards any changes made to the task/trade information.

Task Category Codes



The screenshot shows a window titled "Task Category Codes" with a search bar and a table of records. The table has three columns: Code, Description, and Status. The records are as follows:

Code	Description	Status
ADMIN	Administration Tasks	Active
BLDG	Building Tasks	Active
ELE	Electrical Tasks	Active
ESS	Essential Services Tasks	Active
FIRE	Fire System Tasks	Active
HVAC	HVAC Tasks	Active
WO	Work Order Fault Tasks	Active

At the bottom of the window, there is a search bar with a "Value" field, a checked "Keyword Search" checkbox, and two unchecked checkboxes: "Sort by Description" and "View Active Records Only". Below these are buttons for "Find", "Find Next", "Save", "New", "Delete", "Print", "Help", and "Close".

Description of screen

Task Category are used to group tasks together for reporting and to assist in performing a Task search. (e.g. Essential Services Tasks, HVAC Tasks, Grounds Maintenance, Ad-hoc work order fault task etc..) The Task Category screen is for adding new, viewing, modifying or deleting existing Task Category Codes.

The can be allocated in the task details screen to each task (one category per task).

Roll-Forward Facility

The roll-forward facility is triggered when the date on which the PM is generated (ie. today's date and NOT the date(s) selected to generate jobs) is 2 months or more after the Next Roll-Forward Date.

This date is stored in the Administration *PMS Control* screen (Planned Maintenance).

For example: 02/09/2001 is today's date
 10/07/2001 would be the next roll forward date

The roll forward function will activate when the PM is generated.

The roll forward selects each job, one at a time, in the month(s) being rolled forward and copies it to the next occurrence date into the future calculated from the frequency/interval. The jobs are rolled forward to their first occurrence, at least one PM Cycle (eg. 1 year) into the future. The exact roll forward amount is dependant on the frequency/interval for the task and this is why a task frequency/interval cannot be modified.

The roll-forward facility takes place, job by job within the roll-forward month, in the following way:

- Daily: jobs are copied to the same date

For example: all the days of this month to the days of the next month

- Weekly: jobs are copied to the same day of the week.

For example: all Mondays of this month to the Mondays of the next month

- Monthly: jobs are copied to the same day of the month (ie., etc..)

For example: 23rd of the month to the 23rd of the next month, except February 29th.

- Yearly: jobs are copied to the same day of the month

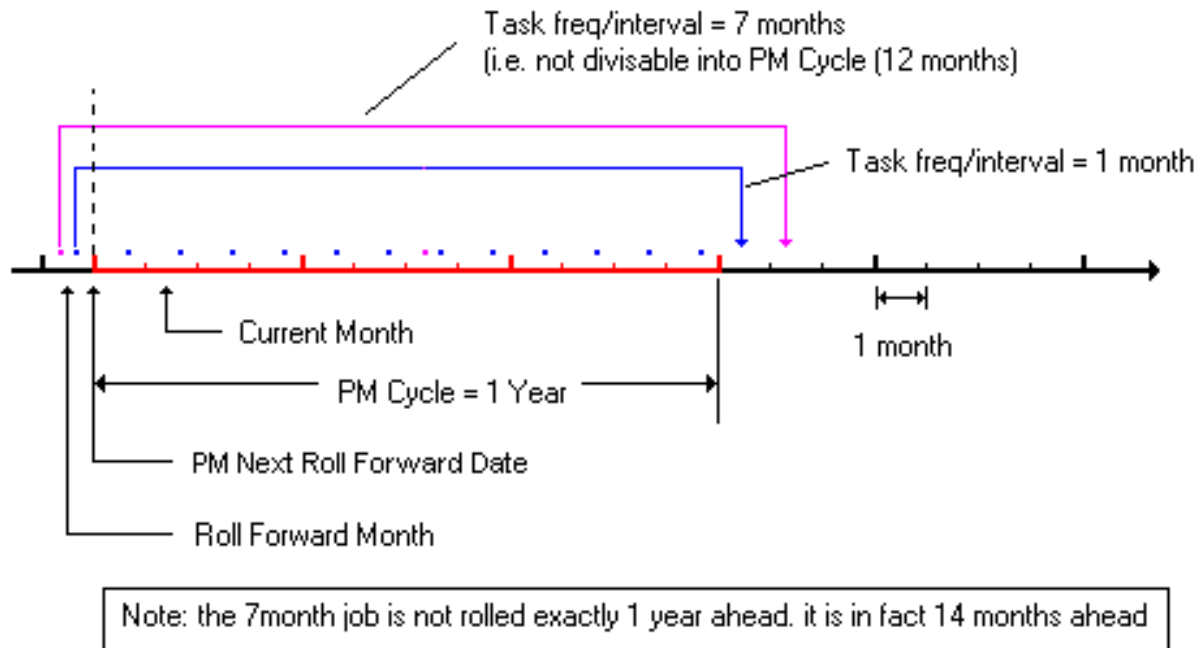
For example: 23/04/2000 to the 23/04/2001

Note: *These are assuming a 1 year PM Cycle*

The task frequency/interval can be more than one Planned Maintenance Cycle (PM Cycle). The PM Cycle can be set for a period from 1 to a maximum of 99 years, BEIMS recommends and defaults to 2 years. The PM Cycle can be set in *PMS Control* from the *Administration* of the Planned Maintenance Module.

Note: *It is recommended to restrict the length of the PM Cycle to between 1 and 5 years, 2 years is preferable. The longer the PM Cycle, the greater the number of records in the plan and the longer it takes to create the records. For further advice on setting up the PM CYCLE contact Mercury Computer Systems.*

Roll Forward worked example



If the task frequency/interval = 7 months, then it will be rolled forward in multiples of 7 months until it occurs the first time in the next PM Cycle (ie. one year from today). This job will not occur exactly twelve months from its current date in the plan but fourteen months in the future (ie. 14 months is the next occurrence at least one PM Cycle ahead).

If today (current month) is in the 1st week July (ie. 03/07/1999), the PM Jobs for the month of May will be rolled-forward (ie. Next Roll Forward Date = 01/05/1999).

Note: *Not all jobs are rolled forward exactly one PM Cycle (1,2, 3 years etc). The exact "roll forward to" date depends on the frequency/interval combination for the task assigned to the job being rolled forward.*

If you have any jobs in your plan for the month of May which have not been generated then you will be prompted with a message, displayed during PM Generation, as follows:

Message: Work Orders not yet generated, your options are;

- Generate work orders now for those days in roll-forward month which have not yet been generated, then proceed with the auto roll-forward.

- Don't generate work order for those days in the roll-forward month which have not yet been generated but still proceed with the auto roll-forward.

PM assigned less than 1 PM Cycle

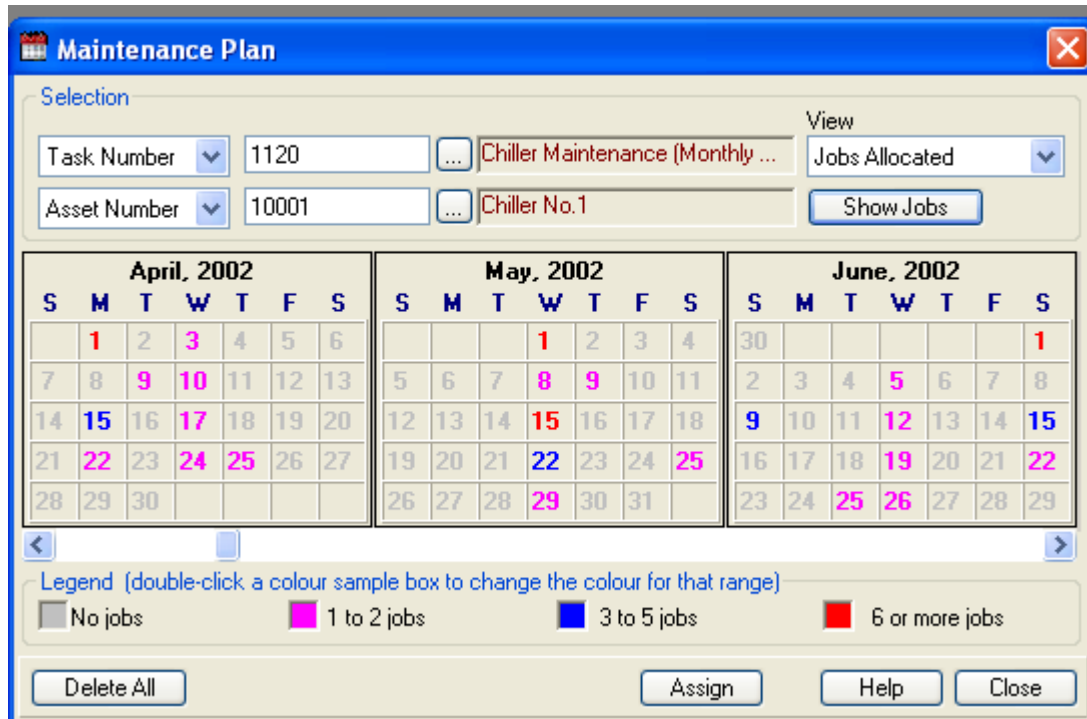
If the asset/task combination is not being assigned over the entire PM Cycle, for the roll-forward facility to function correctly, the frequency/interval combination for the task needs to be a multiple of the PM Cycle.

For example: For a PM Cycle of 1 year, 52 weeks or 12 months

A task frequency/interval of 3 months is O.K.

The task frequency/interval of 7 weeks is not O.K as 7 is not a multiple of 52.

Maintenance Plan



Maintenance Plan

Selection

Task Number: 1120 Chiller Maintenance (Monthly ...

Asset Number: 10001 Chiller No.1

View: Jobs Allocated

Show Jobs

April, 2002							May, 2002							June, 2002						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
	1	2	3	4	5	6				1	2	3	4	30						1
7	8	9	10	11	12	13	5	6	7	8	9	10	11	2	3	4	5	6	7	8
14	15	16	17	18	19	20	12	13	14	15	16	17	18	9	10	11	12	13	14	15
21	22	23	24	25	26	27	19	20	21	22	23	24	25	16	17	18	19	20	21	22
28	29	30					26	27	28	29	30	31		23	24	25	26	27	28	29

Legend (double-click a colour sample box to change the colour for that range)

- No jobs
- 1 to 2 jobs
- 3 to 5 jobs
- 6 or more jobs

Delete All Assign Help Close

Description of screen

The Maintenance Plan screen is used for:

- Assigning assets to tasks.
- Viewing and modifying the Maintenance Plan.
- Deletions from the Maintenance Plan.

The Maintenance Plan calendar can display the information related to the Maintenance Plan (PM) jobs by total estimated time for the jobs, or jobs allocated for each day in the calendar.

The job viewing selection can be for:

- All jobs
- Asset number
- Task Number
- Trade Code
- Building Code
- Asset Category

For Example

- You can view the total number of jobs for the electricians on any day in the calendar.
- You can view the total number of hours allocated to the electricians for a given week.
- You can find out when the next PM job for a specific Asset/Task assignment is scheduled.

The calendar displays PM jobs one PM Cycle before and one PM Cycle after the Next PM Roll Forward Date. The PM Cycle and Next PM Roll Forward Date can be viewed by choosing *View PM Settings* from the Functions Menu.

For example if today is the 10/07/1999 and PM has been generated in July, then the Next PM Roll Forward Date will be 01/06/1999. You will be able to view the calendar over the period June 1998 to May 2000 (PM Cycle = 1 year).

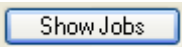
How to:

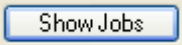
View Choose the appropriate selection from the listboxes available, All jobs, Asset Number, Task Number, Trade Code, Building Code or Asset Category, the default selection is All jobs.

Then enter or select the required code, no selection is required for the All Jobs option.

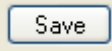
Note: *The list of tasks shown in the search screen is a list of ALL tasks and not just those tasks which have been assigned to the asset.*

Select one of the options in the *View* listbox to view information by either Total Estimated Time or Jobs Allocated.

When the selections are complete, click on the  button to display the information in the calendar. The different colours for the dates correspond to the colours in the legend.

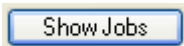
Note: *You must always click on the  button to update the calendar information selections if are changed.*

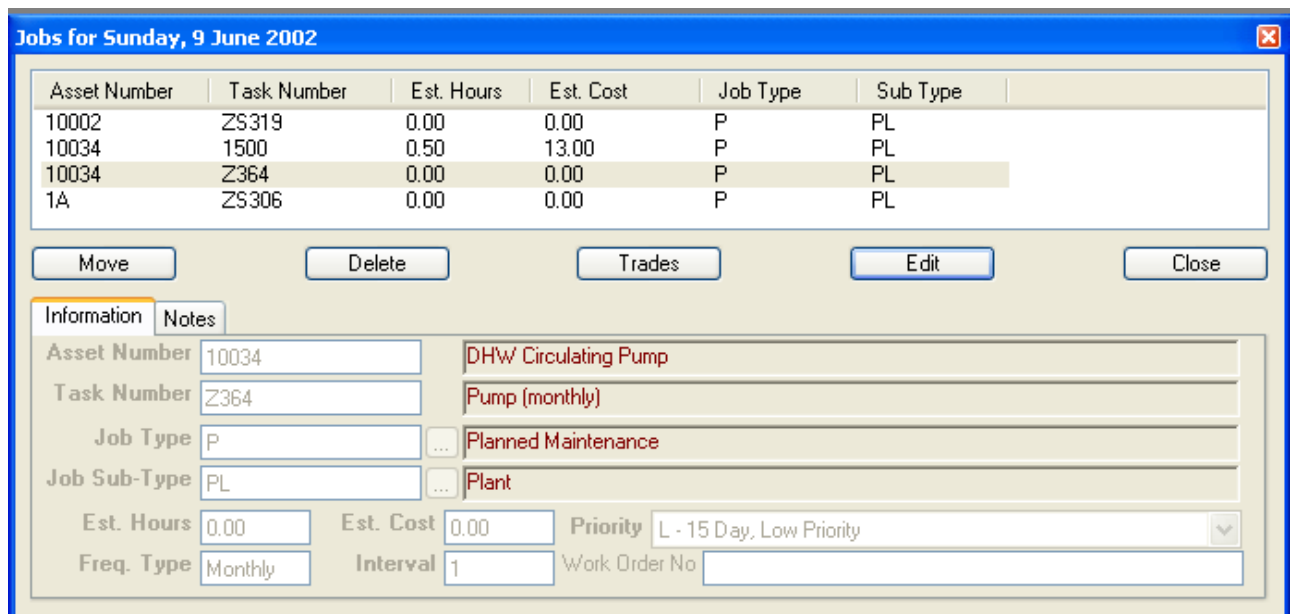
Changing the Preferences in the Legend

Select *PMS Control* from Administration on the Menu Bar at the top of the screen and select maintenance screen display tab, modify the preferences then click on the  button.

Note: Close and re-enter the Maintenance Plan screen to refresh the legend.

View, Modify or Deleting Information in the Calendar

Once you have clicked the  button and the calendar has been updated there will days displayed in colour matching the legend if there are jobs for the selections made. Now double click with the mouse on the required date and the *Jobs for....* screen will open, displaying a listview of all the jobs for that day in the plan.



Asset Number	Task Number	Est. Hours	Est. Cost	Job Type	Sub Type
10002	Z5319	0.00	0.00	P	PL
10034	1500	0.50	13.00	P	PL
10034	Z364	0.00	0.00	P	PL
1A	Z5306	0.00	0.00	P	PL

Buttons: Move, Delete, Trades, Edit, Close

Information Notes

Asset Number: 10034 DHW Circulating Pump

Task Number: Z364 Pump (monthly)

Job Type: P Planned Maintenance

Job Sub-Type: PL Plant

Est. Hours: 0.00 Est. Cost: 0.00 Priority: L - 15 Day, Low Priority

Freq. Type: Monthly Interval: 1 Work Order No:

Description of screen

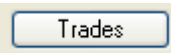
This screen is used to make all modifications and deletions to the maintenance plan, the options include:

- Move an asset/task combination
- Delete an asset/task combination
- Edit an asset/task combination
- Add or modify the trade details for an asset/task combination
- Add notes to an asset/task combination

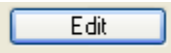
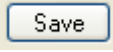
How to:

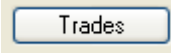
View Click on the asset/task combination required the job details will appear in the *Information* tab fields. The *Notes* tab provides more detailed information regarding this asset/tasks combination job on this day.

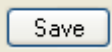
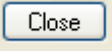
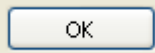
Note: *these notes are specific for this Asset/Task combination on this day only.*

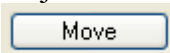
To view the trades for the job, click on the  button and the *Trades for Job....* will open a list of all trades allocated to the job along with the estimated time and estimated cost.

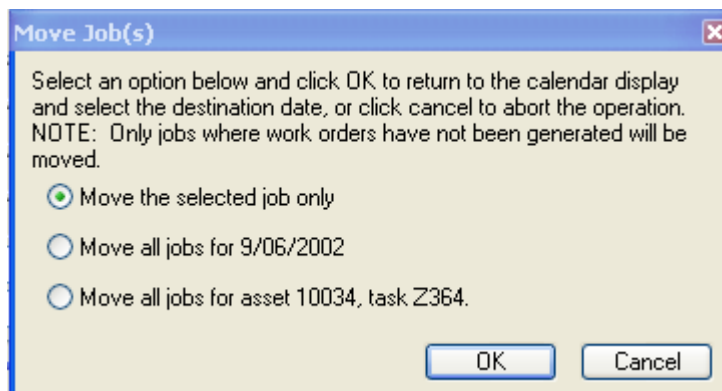
Modify View the asset/task combination required the job details will appear in the *Information* tab fields.

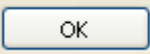
To modify the job type/ sub type or priority, click on the  button and the fields in the *Information* tab will allow the changes to be made. When complete click on the  button and changes for this job will take place from the next occurrence.

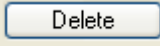
To modify the trade details, click on the  button and the *Trades for Job...* will open. Modify the details as required.

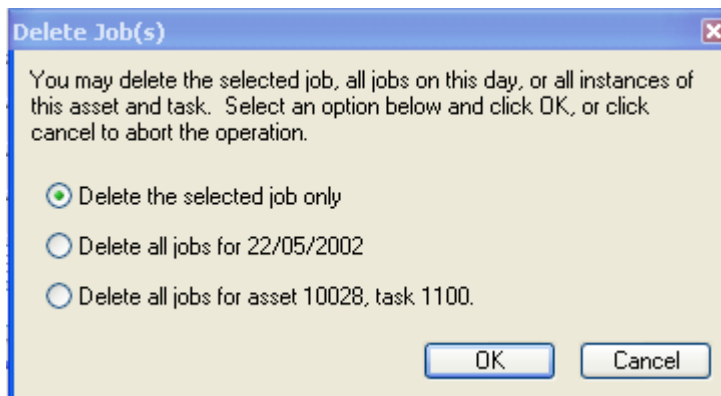
Click on the  to save the record and return to enter additional trades. Or click on the  button then, click on the  button to save the record and return to the original screen.

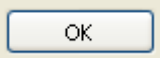
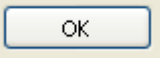
Move View the listview of jobs for the required day, select the asset/task combination required then, click on the  button, and the *Move Jobs* screen will open.



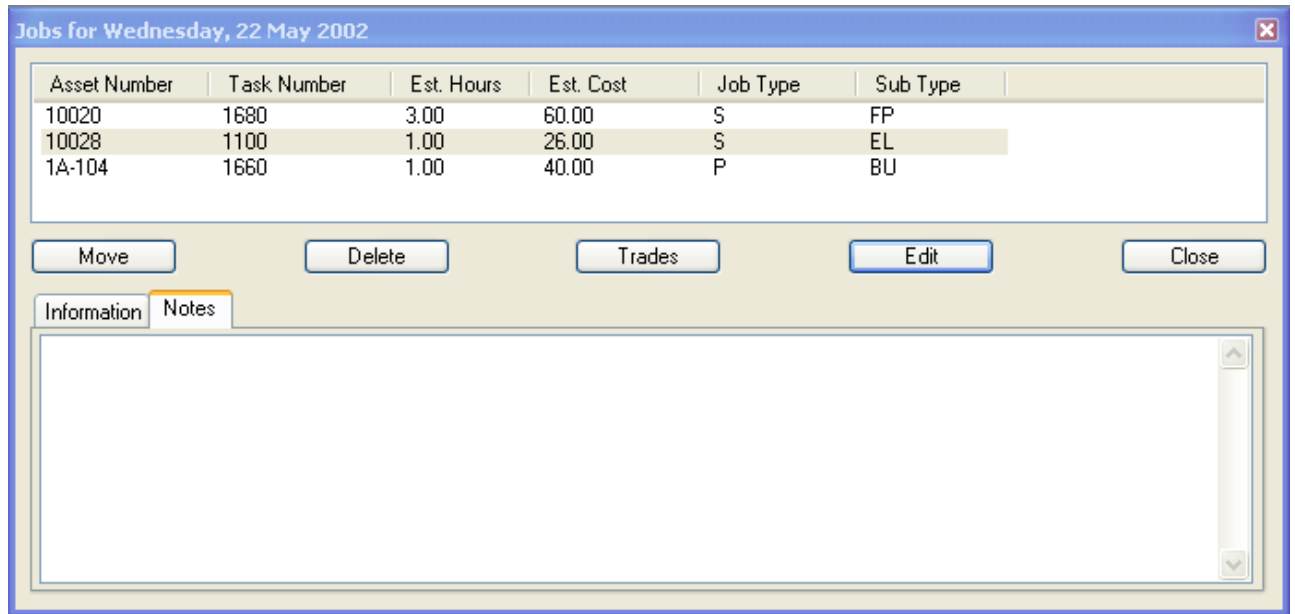
Select the option required the mouse pointer will change to read "Move to" with an arrow on the calendar place the arrow on the day the job is to move to and click the mouse button, then click on the  button.

Delete View the listview of jobs for the required day, select the asset/task combination required then, click on the  button, and the *Delete Jobs* screen will open.



Select the option required, then click on the  button. When the banner appears, click on the  button again and the deletion will take affect.

Notes Tab



The screenshot shows a window titled "Jobs for Wednesday, 22 May 2002". It contains a table with the following data:

Asset Number	Task Number	Est. Hours	Est. Cost	Job Type	Sub Type
10020	1680	3.00	60.00	S	FP
10028	1100	1.00	26.00	S	EL
1A-104	1660	1.00	40.00	P	BU

Below the table are buttons for "Move", "Delete", "Trades", "Edit", and "Close". At the bottom, there are two tabs: "Information" and "Notes". The "Notes" tab is selected, and it contains a large, empty text area for entering notes.

Description of tab

The Notes tab is for adding new notes, or to view and modify existing notes for one asset/task combination on the date selected only. These notes are NOT printed on the work order and are for reference purposes only.

Fields

Notes (Text)

This is an optional field for any notes regarding this particular asset/task/date combination. This is a free text area of unlimited size and you can copy text to this area from the windows clipboard or from other applications.

Note: This is for TEXT only. Line drawing, Symbols, Tables and Text Formatting from other applications is not copied over to this screen.

Generate PM Work Orders



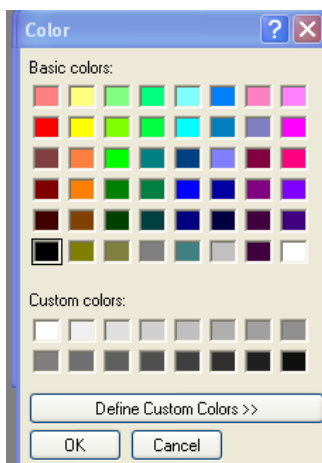
Description of screen

The Generate PM Work Orders screen is for creating work orders from Maintenance Plan. The screen is presented as a calendar similar to the Maintenance Plan, with those days which have jobs displayed in blue and the days that have no jobs to be generated shown in green.

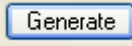
Note: *You can generate PM up to a maximum of 2 months at any one time. The length of the plan generated is at the user discretion.*

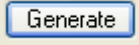
Once generated the work order defaulted Start Date is the date the job was created in the maintenance plan and not the date the generation process was performed. This start date is printed on the Work Order slip.

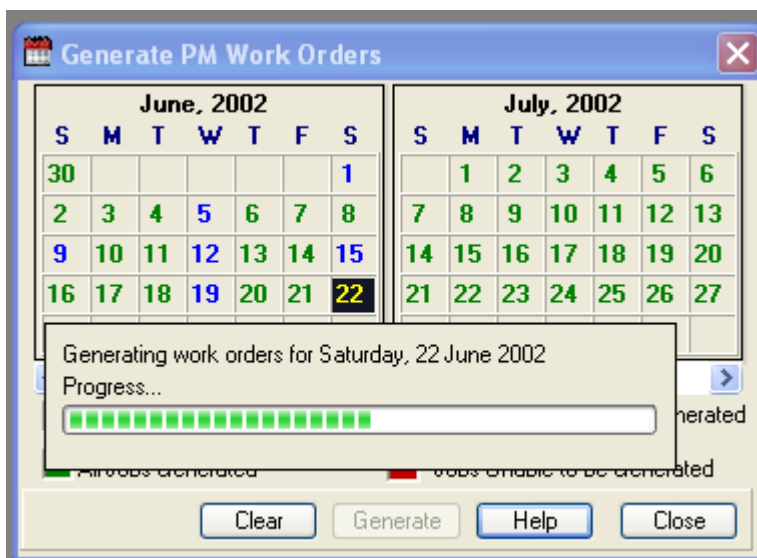
Note: *Colour Legend - You can double-click on any of the four colour sample boxes in the generate PM work orders screen to change the displayed colour.*



How to Generate PM Work Orders

One day To generate for one day only, select the day required by clicking the mouse on the date once. This will highlight the date in black, then click on the  button.

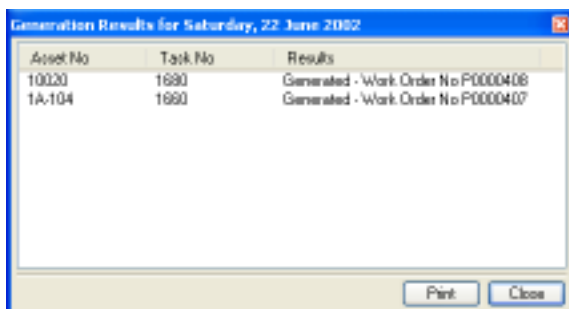
Two or more To generate for two or more weeks, click on the days to be generated for PM jobs. These days will now be in black, when all the dates required are selected, then click on the  button. You can also click and drag the mouse pointer over the days to be generated.



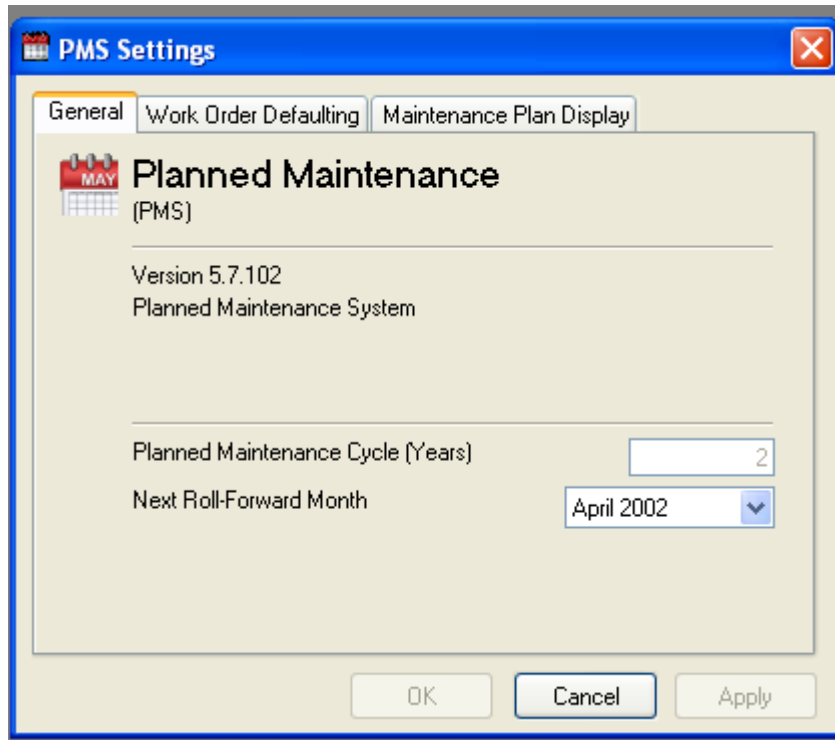
Hints Try to Generate PM Work Orders the same time of the week say, every Monday or Friday. It is easier to generate once a week or once a fortnight than daily, and then check to see if there are any no days that are not generated.

It is important to generate for all days of the week, including Saturday and Sunday, as monthly, yearly and once only jobs fall on the date created.

Note: *You can double click on a generated day to see the generation results for that day or you could report on this information if required using Crystal Reports.*



PMS Control



Description of screen

PMS Control is where the user sets all the default setting for operation of the Planned Maintenance module.

Fields

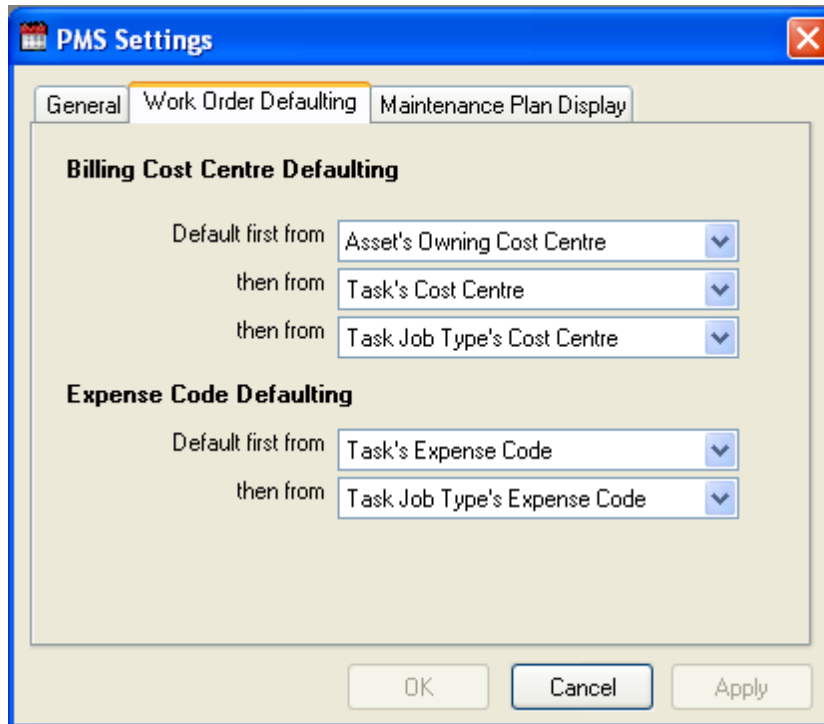
Planned Maintenance Cycle (Yrs)

This field for the length of your PM Cycle in years and defines the how much of the maintenance plan calendar is shown. This value is set and locked in when you initially setup BEIMS.

PM Next Roll Forward Month

This field is for the date that jobs in the maintenance plan will be rolled forward from.. The roll forward is triggered by the current date on the system and not the date which PM Work Orders are being generated for. This date is updated by BEIMS and can be up to 60 days behind.

Work Order Defaulting - Tab



Description of screen

This allows you to determine the order of precedence for defaulting both the Cost Centre and Expense Code onto the work order during PM Generation.

Fields

Billing Cost Centre Defaulting: You may select either; Asset's Owning Cost Centre, Job Type's Cost Centre or Task's Cost Centre. If you select no default (i.e. <blank>) then none will appear on the work order. The top one of the three is the highest priority and the one at the bottom the lowest etc.. If there is no cost centre for that particular asset, task or job type then the next one down takes precedence etc..

Example:

1. Does the asset have an Owning Cost Centre (refer to Asset Details)? If YES then use this on Work Order. If NO then
2. Does the Task have a Cost Centre (refer to Task Details)? If YES then use this on Work Order. If NO then
3. Does the Job Type code from the task have a Cost Centre (refer to Job Type Codes)? If YES then use this on Work Order. If NO then

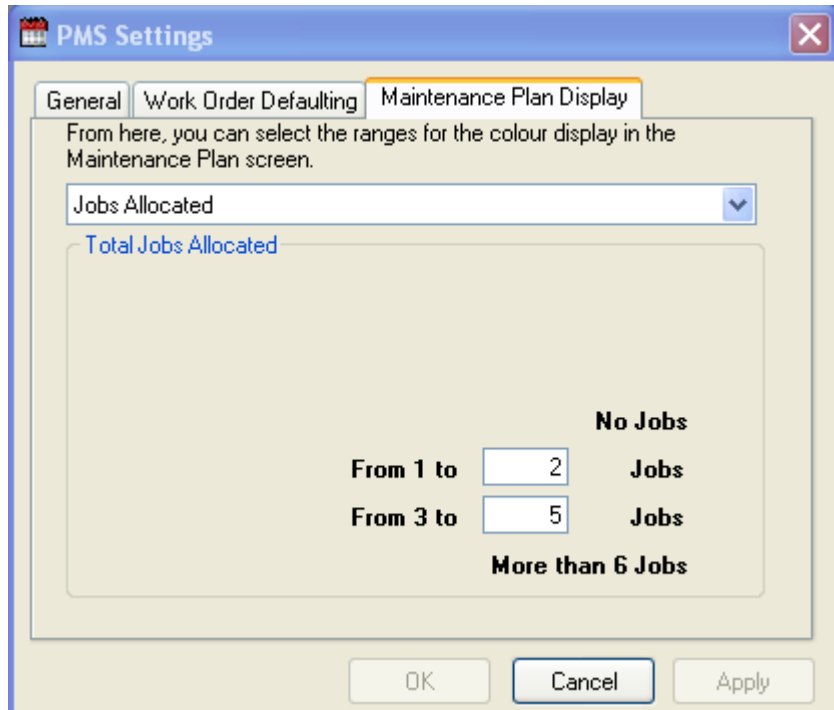
4. Leave the Billing Cost Centre field on the work order blank.

Expense Code Defaulting: You may select either; Task's Expense Code or Job Type's Expense Code. If you select no default (i.e. <blank>) then none will appear on the work order. The top one of the two is the highest priority and the one at the bottom the lowest etc.. If there is no expense code for that particular task or job type then the next one down takes precedence etc..

Example:

1. Does the Task have an Expense Code (refer to Task Details)? If YES then use this on Work Order. If NO then
2. Does the Job Type code from the task have an Expense Code (refer to Job Type Codes)? If YES then use this on Work Order. If NO then
3. Leave the Expense Code field on the work order blank.

Maintenance Plan Display – Tab

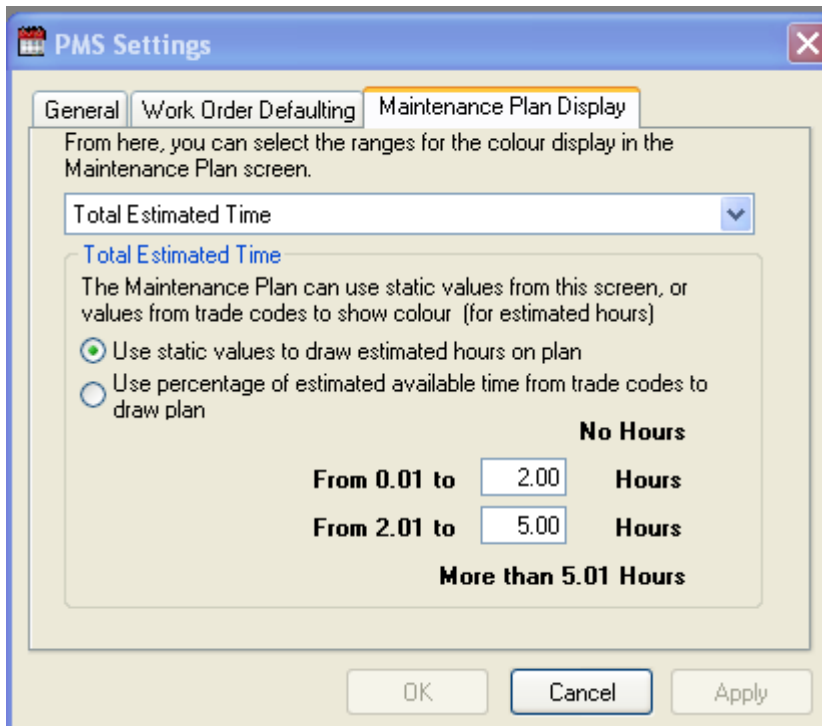


Description of screen

This is designed to allow you to set the ranges for the Total Estimated Time and Jobs Allocated options on the Maintenance Plan screen. This provides a better idea of the work load spread across each month by using different colours for each parameter defined. The colours shown can be set individually for each workstation by double clicking on the colour box at the bottom of the Maintenance Plan screen. This uses your workstation Windows colour palette.

Fields

Jobs Allocated This option allows you to set the display parameters for the colour legend ranges in the maintenance plan for jobs allocated.

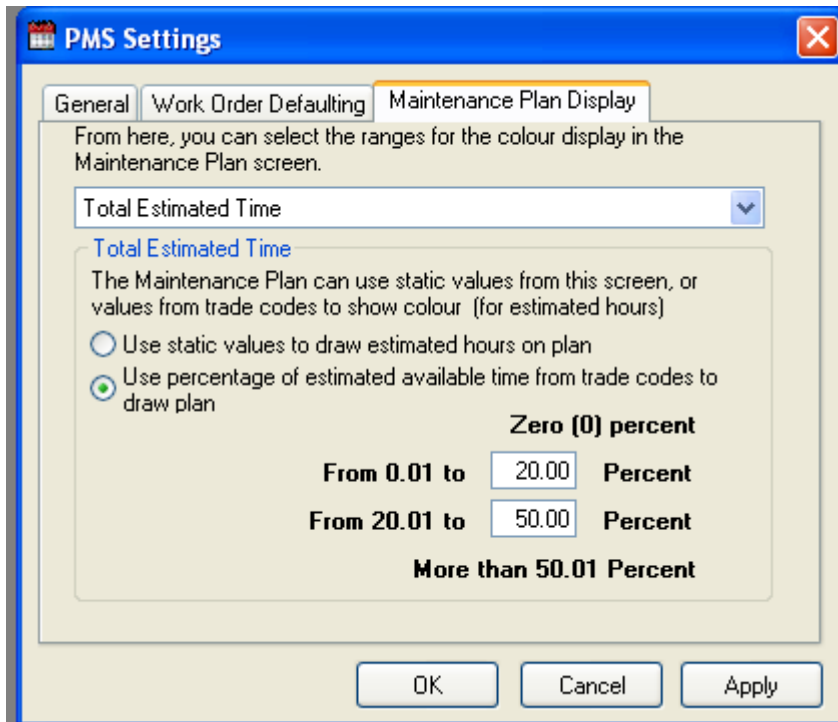


There are two choices with which to display the estimated time;

Fields

Total Estimated Time

This calculates the estimated time per day based on the records you have selected to display in the Maintenance Plan screen. Sum of Estimated Hours for the day as determined for each trade on the task. This is done by using the Est. Hrs field in the Task Details, Trade screen



Fields

Percentage of estimated Time Showing the percentage of the Estimated Hrs for the day for the trade against the Estimated Available Hrs as defined in the Trade Code screen (ISS)

Example:

If the Trades Est Available Hrs for day were 20 and there was 60 hrs allocated in the plan then the percentage is 33% allocated. Both of these are only designed to give general indications of workload. More detailed analysis can be done by running one of the standard BEIMS PM report or graphs, otherwise you could create your own custom reports using Seagate Crystal Reports.

REPORTS

There are a few report options available and provide a comprehensive list of details for the report selected. The details typically include the asset number, task and other details depending on the report.

- Task List Reports
- Assignment Report
- Trade Commitment Report
- PM by Trade, Asset and Task Report
- Assets with NO PM Assigned Report
- Work Commitment Report
- Task Category List Report
- PM by Asset and Task Report
- Ungenerated PM Report

It is possible to view the report format before sending to the printer by selecting the *Screen* option in the *Destination* frame. The other options are to print directly to the printer or to a file.

Note: *If the report has already run it should start printing on the printer straight away providing the printer is ready (on-Line). This may also depend on your printer/network settings.*

There are three sections to the reports / graphs –

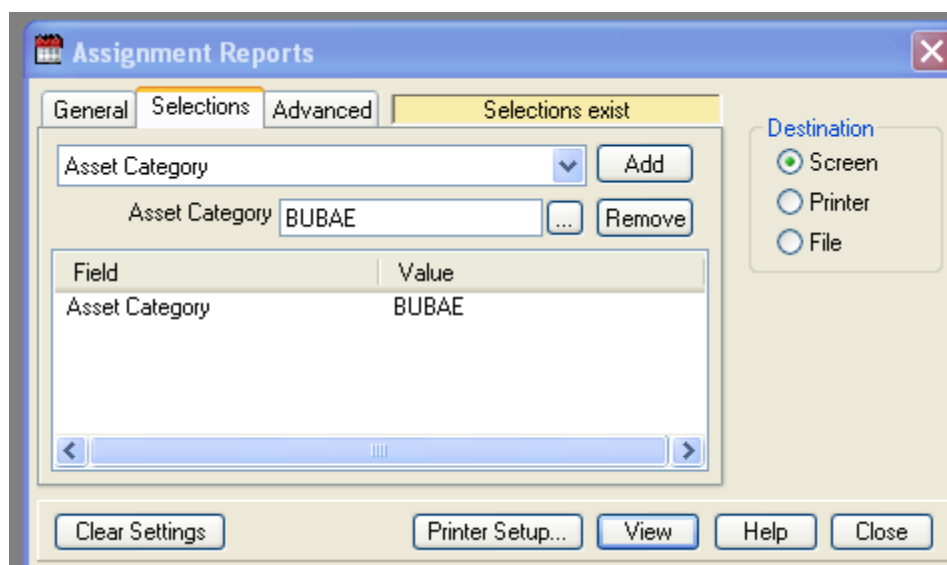
- General Tab
- Selections Tab
- Advanced Tab

If there is a selection for the report, it will highlight that a 'selection exist' at the top of the layout. This is general settings for all reports and graphs in BEIMS.

Clear Settings This will clear any selections you have in the report.

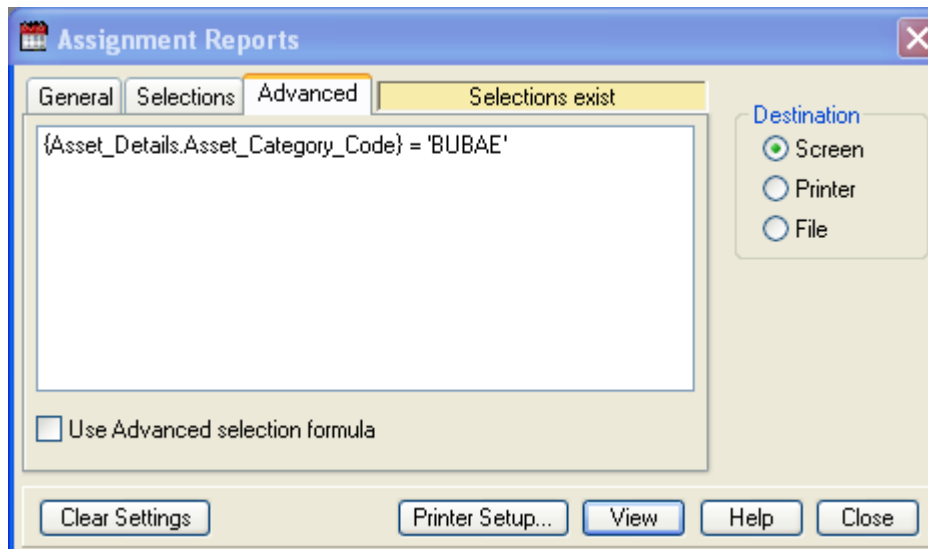
Printer Setup This will allow you to choose a different printer and select orientation of page

Selections tab



Multi-select field Can be an individual selection, multiple or all of the required fields. This will allow you to build a custom report of your own.

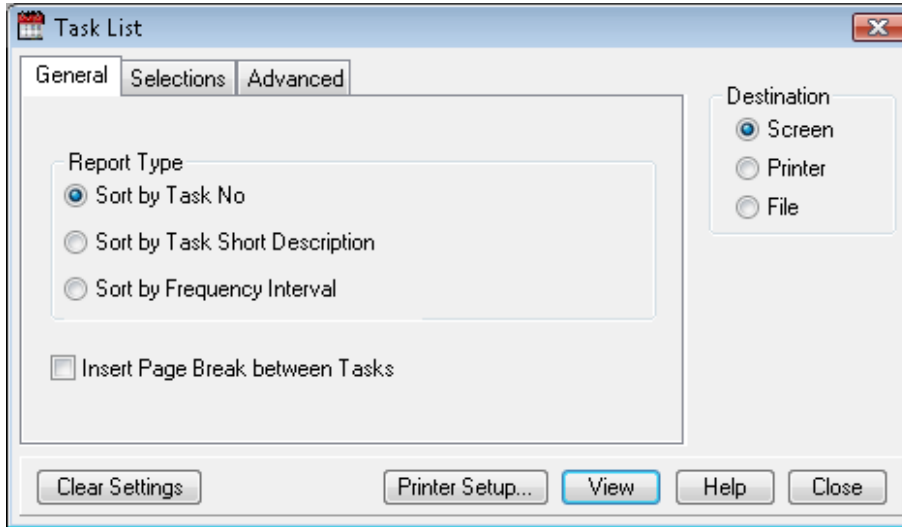
Advanced tab



The Advanced Tab is designed to allow you to insert your own formulae to extend the report selections. The syntax of the formulae must be in the same format as you would use if creating a custom report using Seagate Crystal Reports. If this is incorrect the report will return error messages and most likely will not run. You will require some Crystal Report experience to use this function effectively

Used for an advanced selection formula and to view a selection formula that has been set on the General and Selection tabs.

Task List Report



Description of report

The Task List report allows you to run the following report types listing all tasks, by task number or task short description order or frequency/interval.

Each line displayed on the report will show Task Details which include: Task No., Task Category, Job type, Job Sub Type, Reference, Secondary Reference, Frequency, Priority, Status, Cost Centre, Expense and Contract No.

Select the required Sort Order from the list provided. This will define which order the information will be sorted ie. a new page will be started for each different group. There will be one line per task per group selected.

There are three report destinations:

- To the screen select the Screen button then click on VIEW.
- To the printer select the Printer button and click on PRINT.
- To the file select File button and click on EXPORT.

The report Sort Order Options:

- Task No.
- Short Description
- Frequency Interval

The report Selections Tab options that can be added:

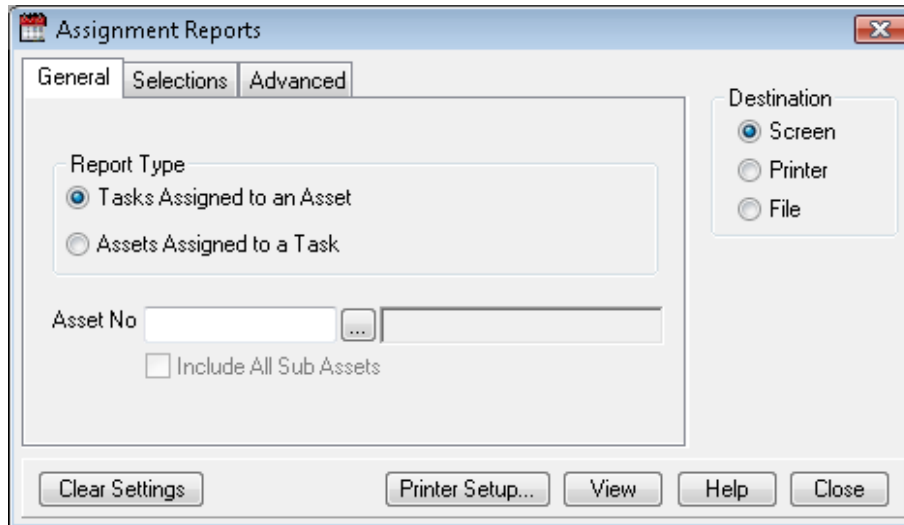
- Job Type
- Sub Type
- Priority
- Task Number
- Contract No
- Domain
- Domain Group
- Expense Code



- Priority
- Task Category

Insert Pager Break This option will break the continuous report and start a new page for each
between Tasks(tickbox) new task number in the report.

Assignment Report



Description of report

The Assignment Reports report allows you to run the following reports, tasks assigned to an asset or assets assigned to a task.

Each line displayed on the report will include: asset number and description, task number and short description, building, floor, job type, sub type and priority.

Select the required Sort Order from the list provided. This will define which order the information will be sorted ie. a new page will be started for each different group. There will be one line per task per group selected.

There are three report destinations:

- To the screen select the Screen button then click on VIEW.
- To the printer select the Printer button and click on PRINT.
- To the file select File button and click on EXPORT.

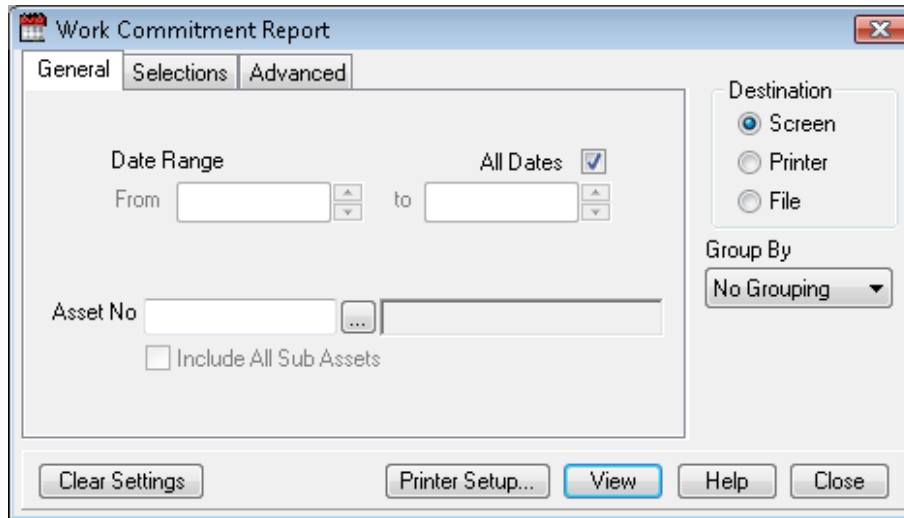
The report Sort Order Options:

- Tasks assigned to Assets
- Assets assigned to tasks

The report Selections Tab options that can be added:

- Asset Category
- Department
- Site
- Domain
- Domain Group

Work Commitment Report



Description of report

The Work Commitment Reports allows you to run time commitment reports by date range with no grouping or by day, week or month for an individual or all assets in the plan. The report details provided include; planned date, asset number and description, task number and short description, work order number if the plan has been generated, job type, sub type, the total estimated hours and cost.

This report relies on having the estimated hours and costs entered for each trade assigned to a planned maintenance job. Select the required group by option from the list provided. This will define which order the information will be grouped ie. a new page will be started for each different group. There will be one line per task per group selected.

There are three report destinations:

- To the screen select the Screen button then click on VIEW.
- To the printer select the Printer button and click on PRINT.
- To the file select File button and click on EXPORT.

The report Group by Options:

- No Grouping
- Day
- Week
- Month

The report Selections Tab options that can be added:

- Asset Category
- Building
- Department
- Job Type
- Site
- Task No.
- Domain
- Domain group

Trade Commitment Report

Trade Commitment Report

General Selections Advanced

Date Range

From to All Dates

Asset No

Include All Sub Assets

Destination

Screen

Printer

File

Group By

No Grouping

Clear Settings Printer Setup... View Help Close

Description of report

The Trade Commitment Reports allows you to run time commitment reports by date range, with no grouping or by day, week or month for an individual or all assets in the plan. The details provided include; planned date, trade, asset number, description, task number and short description, the total estimated hours and cost.

This report relies on having the estimated hours and costs entered for each trade assigned to a planned maintenance job. Select the required group by option from the list provided. This will define which order the information will be grouped ie. a new page will be started for each different group. There will be one line per task per group selected.

There are three report destinations:

- To the screen select the Screen button then click on VIEW.
- To the printer select the Printer button and click on PRINT.
- To the file select File button and click on EXPORT.

The report Group by Options:

- No Grouping
- Day
- Week
- Month
- Trade

The report Selections Tab options that can be added:

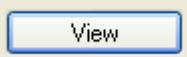
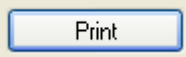
- Asset Category
- Building
- Department
- Job Type
- Site
- Task No.
- Trade Code
- Domain
- Domain Group

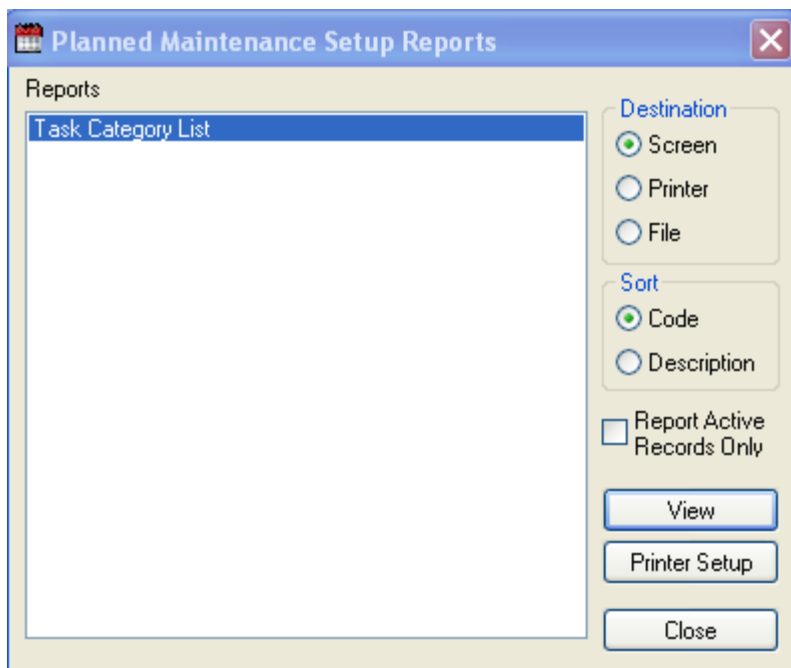
Task Category List Report

Description of Report

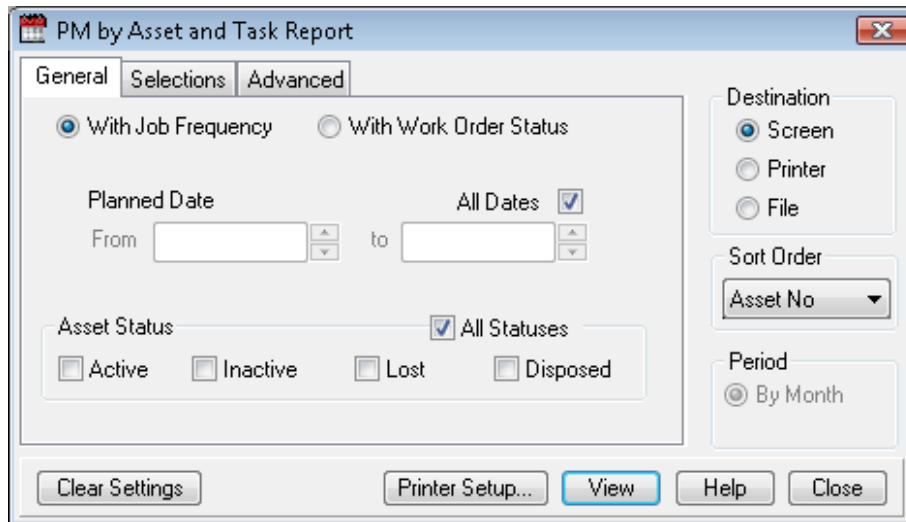
The task category list report details include the code, description and status from the simple edit screens table.

The reports can be sent to one of three destinations, the options are; screen, printer and file. The sort order options include code or description. The default is to view the report, if the printer destination is

selected the  button will change to a  button.



PM by Asset and Task Report



Description of report

The PM by Asset and Task Report allows you to run the report with either Job Frequency or With Work Order Status. You can select what Asset Statuses you want and select a sort order. You can enter a Planned Date range for the report or select All dates. It is a grid based report.

There are three report destinations:

- To the screen select the Screen button then click on VIEW.
- To the printer select the Printer button and click on PRINT.
- To the file select File button and click on EXPORT.

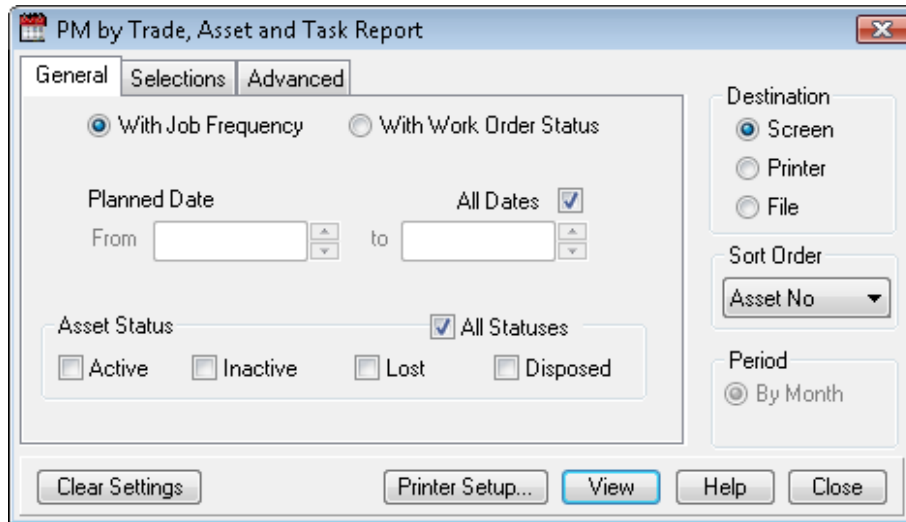
Asset Status

- Active
- Inactive
- Lost
- Disposed

The report Selections Tab options that can be added:

- Domain
- Domain Group
- Job Type
- Job Sub Type
- Priority
- Asset No
- Asset Category
- Building
- Task No

PM by Trade, Asset and Task Report



Description of report

The PM by Trade, Asset and Task Report allows you to run the report with either Job Frequency or With Work Order Status. You can select what Asset Statuses you want and select a sort order. You can enter a Planned Date range for the report or select All dates. It is a grid based report.

There are three report destinations:

- To the screen select the Screen button then click on VIEW.
- To the printer select the Printer button and click on PRINT.
- To the file select File button and click on EXPORT.

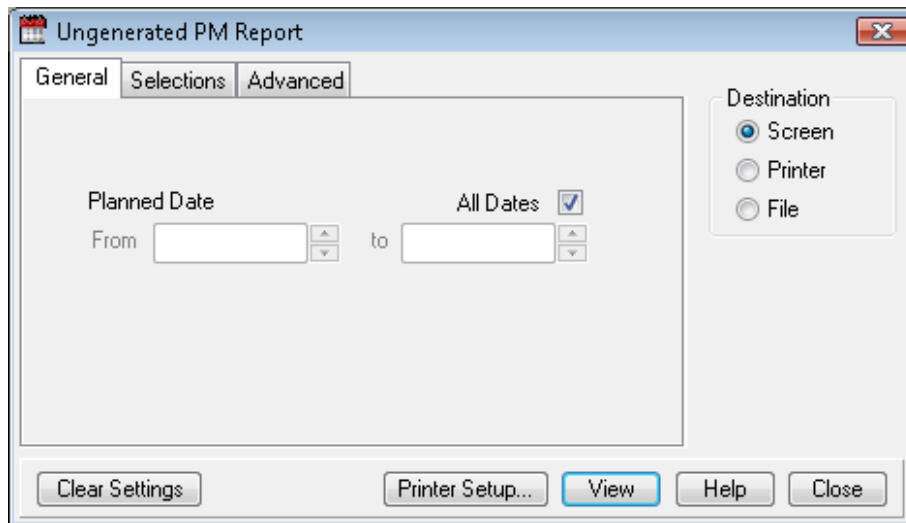
Asset Status

- Active
- Inactive
- Lost
- Disposed

The report Selections Tab options that can be added:

- Domain
- Domain Group
- Job Type
- Job Sub Type
- Priority
- Asset No
- Asset Category
- Building
- Task No
- Trade
- Trade Type

Ungenerated PM Report



Description of report

The Ungenerated PM Report allows you to run the report with a Planned Date range. It will display all the Jobs that are waiting to be generated in to work orders.

There are three report destinations:

- To the screen select the Screen button then click on VIEW.
- To the printer select the Printer button and click on PRINT.
- To the file select File button and click on EXPORT.

The report Selections Tab options that can be added:

- Domain

Assets with NO PM Assigned Report

Assets with NO PM Assigned Report

General Selections Advanced

Purchase Date All Dates

From to

Asset Status

Active Lost

Inactive Disposed

Ownership Status

Owned Gift

Leased Borrowed

Rented <none>

Destination

Screen

Printer

File

Sort Order

Asset Category

Clear Settings Printer Setup... View Help Close

Description of report

The Assets with No PM Assigned Report will allow you to enter Purchase Date range of the Assets and also select Asset status and its Ownership Status. You can sort the report data by selecting a category from the Sort Order listing.

There are three report destinations:

- To the screen select the Screen button then click on VIEW.
- To the printer select the Printer button and click on PRINT.
- To the file select File button and click on EXPORT.

The report Sort Order by Options:

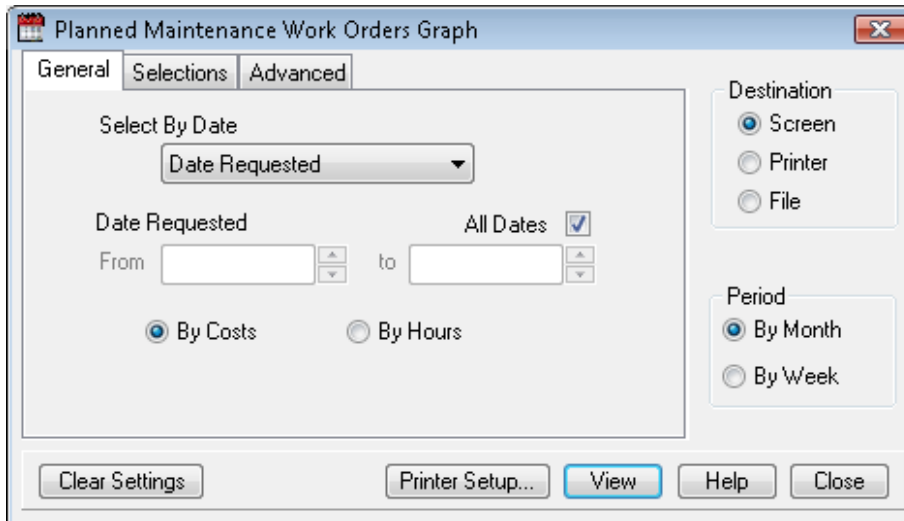
- Asset Category
- Building

The report Selections Tab options that can be added:

- Asset Category
- Building
- Department
- Domain
- Domain Group
- Finance Group
- Site

GRAPHS

PM Works Order Graph



Description of Graph

This graph displays planned maintenance work orders during the date range specified or all dates. The General selections include by cost or by hours and a period by month or by week.

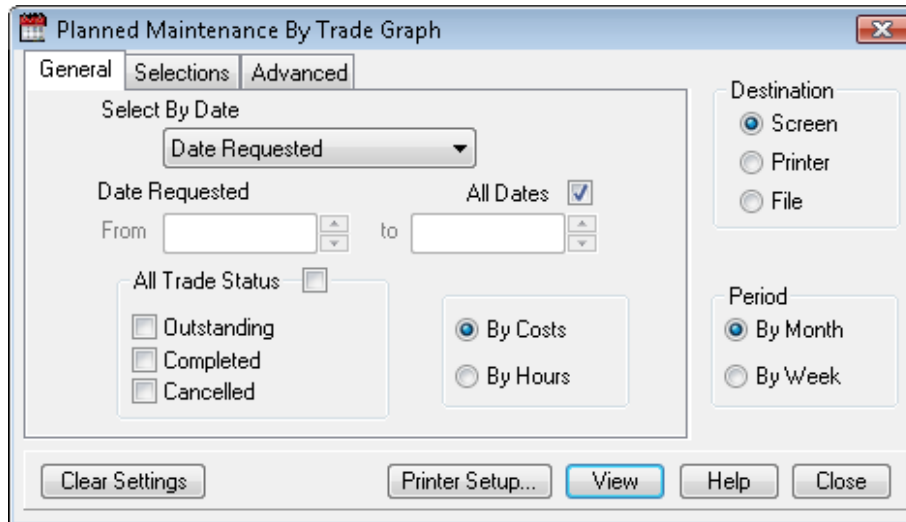
There are three graph destinations:

- To the screen select the Screen button then click on VIEW.
- To the printer select the Printer button and click on PRINT.
- To the file select File button and click on EXPORT

The graph Selections Tab options that can be added:

- | | |
|------------------|---------------------|
| • Asset Category | • Expense Code |
| • Asset No | • Finance Group |
| • Building | • Job Sub Type |
| • Cost Centre | • Job type |
| • Contract No. | • Priority |
| • Department | • Site Code |
| • Division | • Task No. |
| • Domain | • Task Category |
| • Domain Group | • Work Order Status |

PM by Trade Graph



Description of Graph

This graph displays planned maintenance by trade during the date range specified or all dates. The General selections include by cost or by hours a period by month or by week and all trade Status.

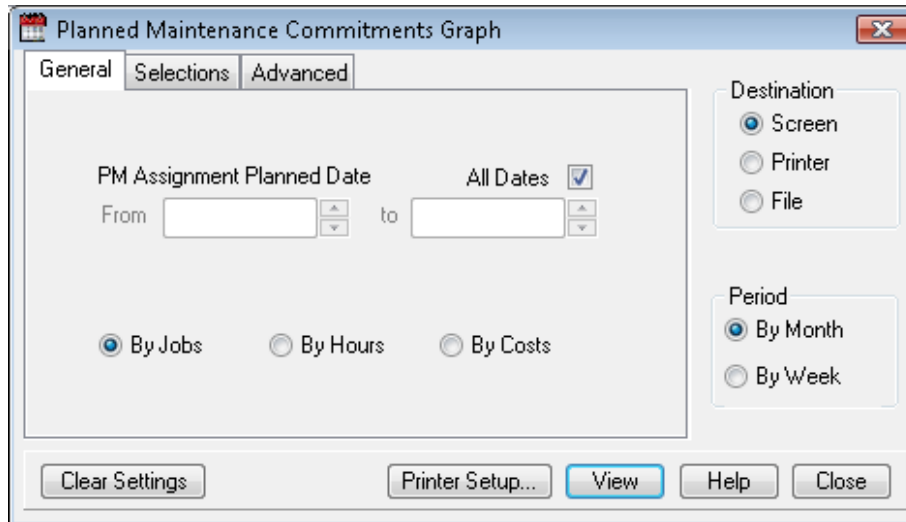
There are three graph destinations:

- To the screen select the Screen button then click on VIEW.
- To the printer select the Printer button and click on PRINT.
- To the file select File button and click on EXPORT

The graph Selections Tab options that can be added:

- Asset Category
- Asset No.
- Building
- Cost Centre
- Contract No.
- Department
- Division
- Domain
- Domain Group
- Expense Code
- Finance Group
- Job Sub Type
- Job type
- Priority
- Site Code
- Task No.
- Task Category
- Trade Type

PM Commitments Graph



Description of Graph

This graph displays planned maintenance commitments during the date range specified or all dates. The General selections include by cost, by hours, by job a period by month or by week.

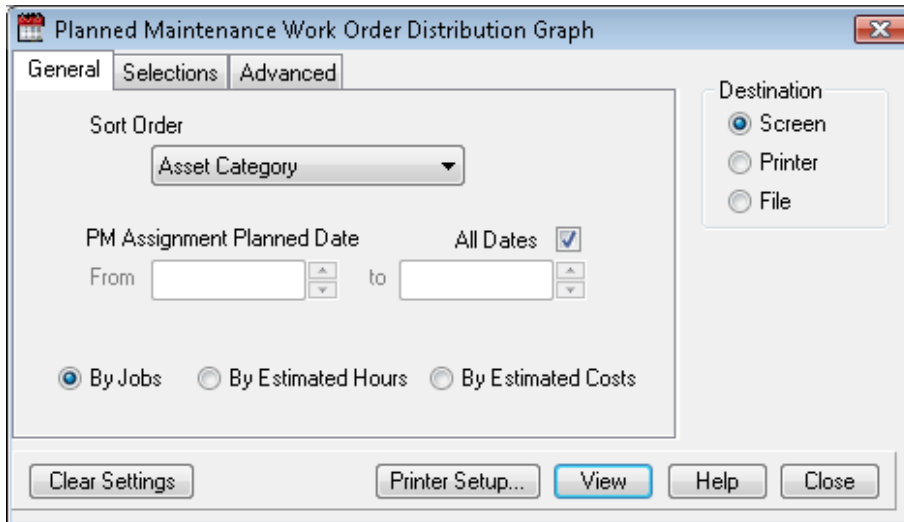
There are three graph destinations:

- To the screen select the Screen button then click on VIEW.
- To the printer select the Printer button and click on PRINT.
- To the file select File button and click on EXPORT

The graph Selections Tab options that can be added:

- Asset Category
- Asset No.
- Building
- Cost Centre
- Contract No.
- Contract Type
- Department
- Division
- Domain
- Domain Group
- Expense Code
- Finance Group
- Job Sub Type
- Job type
- Priority
- Site Code
- Task No.
- Task Category

PM Work Order Distribution Graph



Description of Graph

This graph displays planned maintenance work order distribution during the date range specified or all dates. The General selections include by jobs, by estimated hours, by estimated cost.

There are three graph destinations:

- To the screen select the Screen button then click on VIEW.
- To the printer select the Printer button and click on PRINT.
- To the file select File button and click on EXPORT

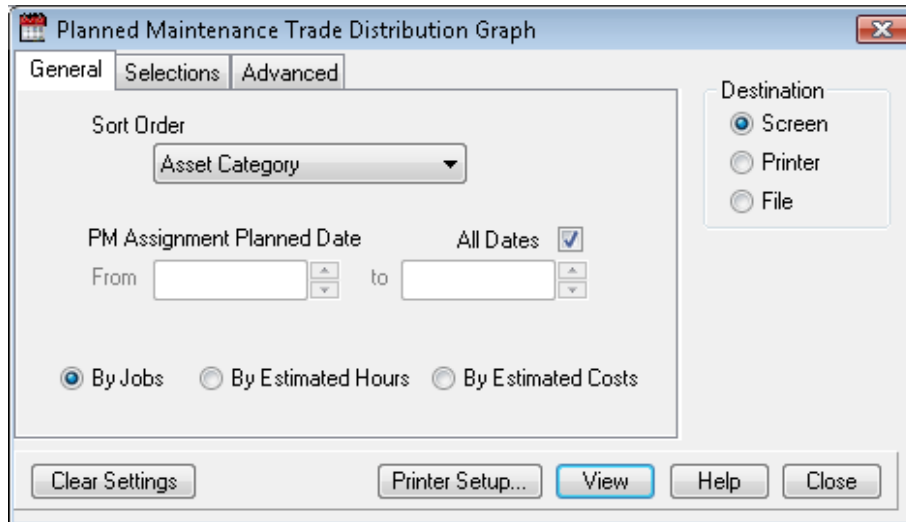
The graph Sort Order Options:

- Asset Category
- Asset No.
- Building
- Cost Centre
- Contract No.
- Contract Type
- Department
- Division
- Domain
- Domain Group
- Expense Code
- Finance Group
- Job Sub Type
- Job type
- Priority
- Site Code
- Task No.
- Task Category
- Work Order No.

The graph Selections Tab options that can be added:

- Asset Category
- Asset No.
- Building
- Cost Centre
- Contract No.
- Contract Type
- Department
- Division
- Domain
- Domain Group
- Expense Code
- Finance Group
- Job Sub Type
- Job type
- Priority
- Site Code
- Task No.
- Task Category

PM Trade Distribution Graph



Description of Graph

This graph displays planned maintenance trade distribution during the date range specified or all dates. The General selections include by jobs, by estimated hours, by estimated costs.

There are three graph destinations:


- To the screen select the Screen button then click on VIEW.
- To the printer select the Printer button and click on PRINT.
- To the file select File button and click on EXPORT

The graph Selections Tab options that can be added:

- Asset Category
- Asset No.
- Building
- Cost Centre
- Contract No.
- Contract Type
- Department
- Division
- Domain
- Domain Group
- Expense Code
- Finance Group
- Job Sub Type
- Job type
- Priority
- Site Code
- Task No.
- Task Category



TO RUN THE REPORTS AND GRAPHS:

The report/graph options include View - print to the screen, Print - print to the printer and File - print to a nominated file.

1. Click on the View button to run the report to the screen. The report/graph is presented using the selection criteria made.
2. Use the Scroll Bars to view the entire page, adjust the page size by clicking on the Magnification Factor button at the top centre of the screen.
3. If the format is O.K, you can print a hard copy of the report/graph, by clicking on the  button.

Note: *As the report/graph has already run it should start printing straight away providing the printer is ready (On-Line). This can also depend on your printer/network settings.*

It is possible to export the report/graph using the  button.

4. Click on the  button in the top right corner of the screen to close the printed report.
5. Now, click on the  button to close the *Report/graph* screen.