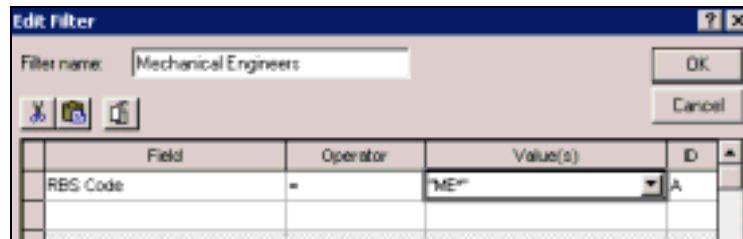


If you made the previous change, make sure the Availability Field format is set back to “Parent”.

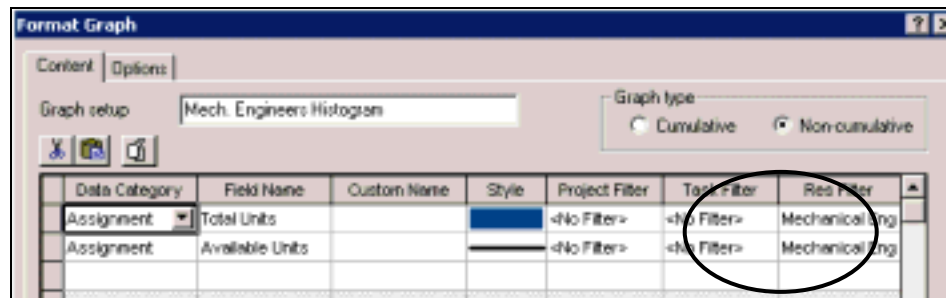
Common needs in this situation are to be able to capture the overall load (or “demand”) for the group and be able to level load this group of resources all at once.

As often in PS8, the key is first to create a **Filter** which will allow you to extract information for this particular aggregate.

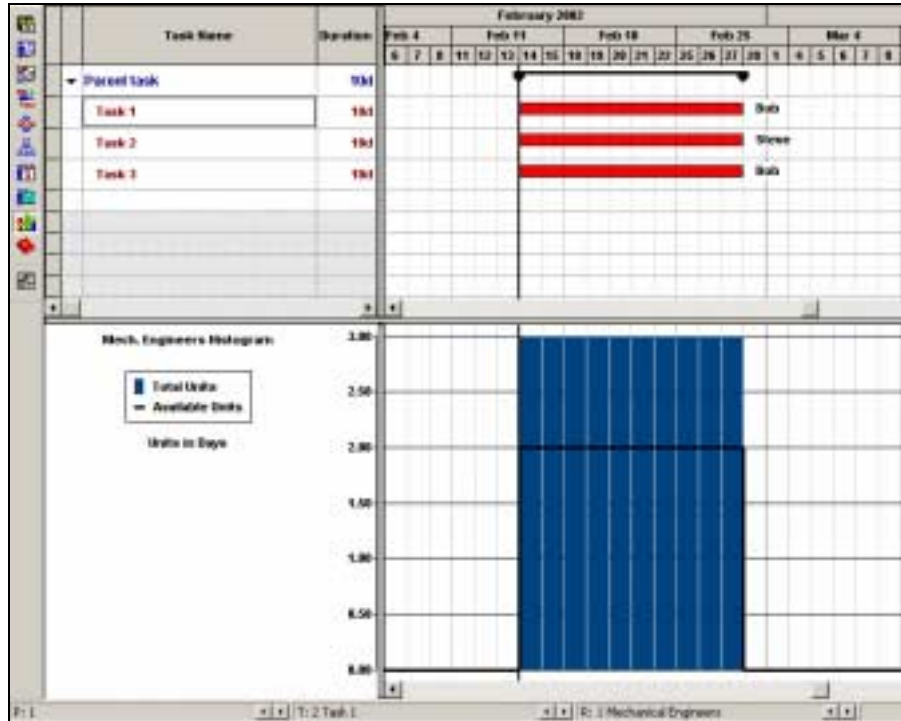
In the Define/Filters... menu of PS8, Make sure the Resource Field Category is selected and click the New Button. Define the following Resource filter and make sure it works by selecting the “Set current” button. If your filter doesn’t work properly, nothing else will work!



We can now use this filter in the definition of a Resource Histogram for the mechanical engineer group. In the Define/Graphs... menu of PS8, Choose New and define the parameters for the graphs as below:



Now you can display a split view of the Gantt chart and the Graph, to show what is the overall demand of Mechanical engineers,

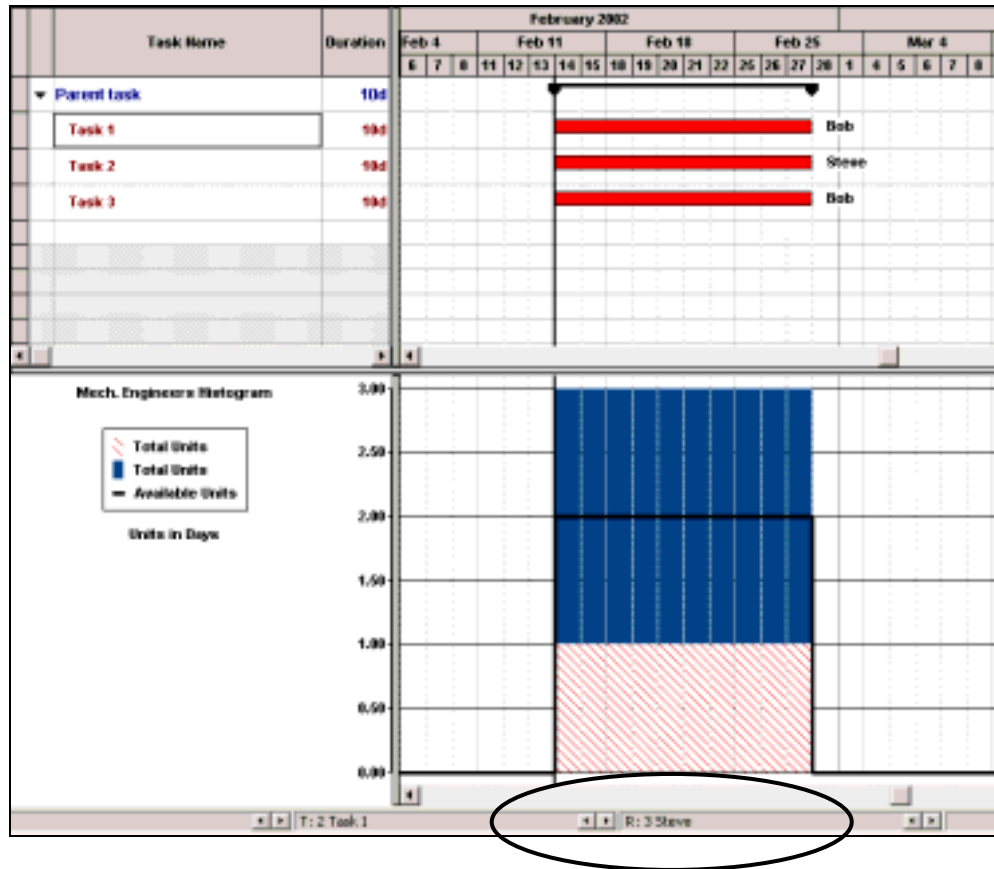


If you wish, you can also edit the graph definition to display the Total Unit of one specific resource among the global demand. To do so, double click the histogram and edit the Content tab as follow:

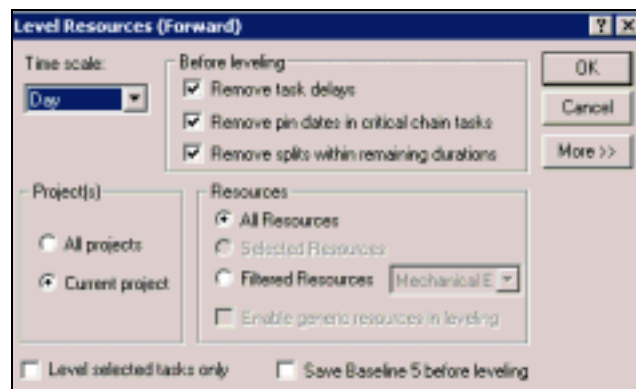
Data Category	Field Name	Custom Name	Style	Project Filter	Task Filter	Res. Filter
Assignment	Total Units			<No Filter>	<No Filter>	Current Res.
Assignment	Total Units			<No Filter>	<No Filter>	Mechanical Eng
Assignment	Available Units			<No Filter>	<No Filter>	Mechanical Eng

Note that the first row uses the current resource filter of PS8.

In the Gantt/Histogram view, the histogram will display the Total Units for both the group and the resource selected in the Status bar of PS8.



In this scenario, the Level resources tool (or Resolve Resource Contention tool for Critical Chain projects) will only deal with the individual resources. Actually, the “Enable generic resources in leveling” option is not even available since there’s no Generic Resources defined.



Note that the Resource filter could be used in the leveling tool. If you do so, it will NOT perform a global leveling as we will describe in the scenario 3, but simply allow PS8 to deal only with the individual resources responding to the filter criteria.



3. Scenario 2: Using generic resources only for planning purposes, then replacing generic assignments by individuals when executing the plan

In this situation, you do not know who will be the individual working on the task when the project will start. For now, you are just in the early planning or budgeting phase.

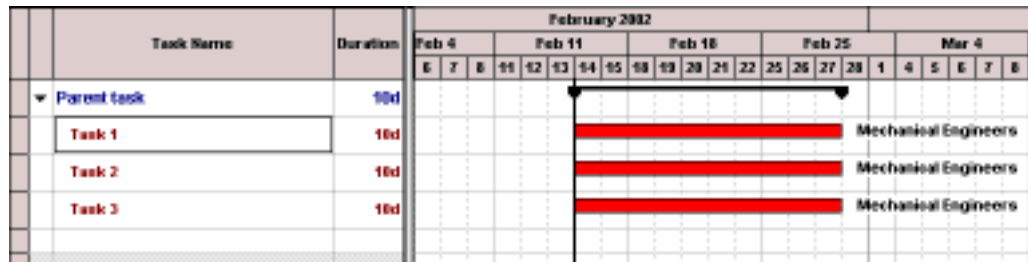
Here is what your Resource List should look like:

Resource #	RBS Code	Resource Name	Type	Availability	Generic	Default Rate
1	ME	Mechanical Engineers	LABOR	0h/d	Yes	8h/d
2	ME1	Bob	LABOR	8h/d	No	8h/d
3	ME2	Steve	LABOR	8h/d	No	8h/d

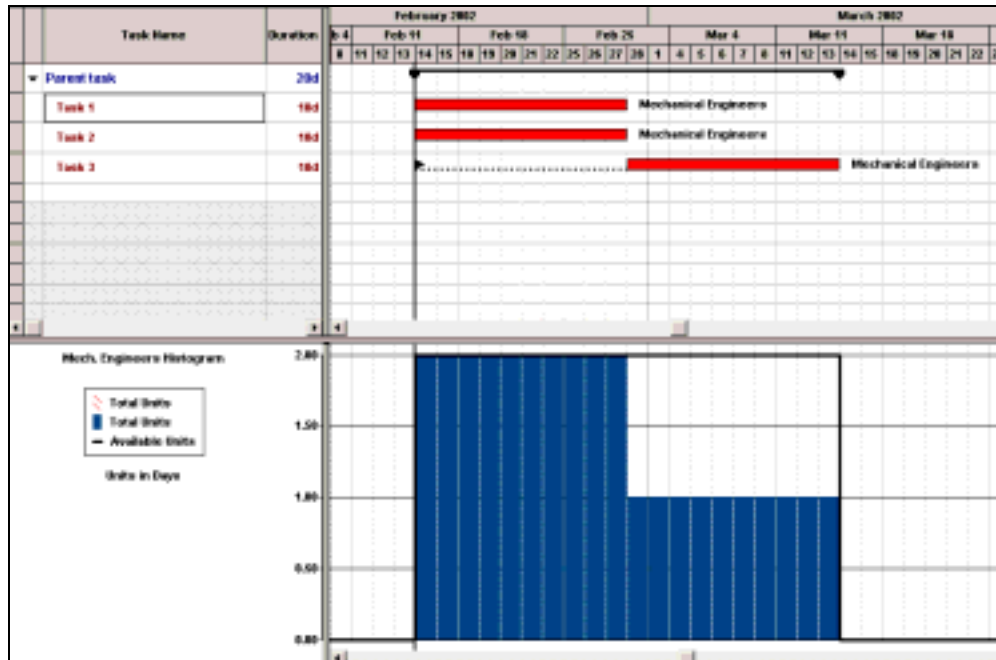
The Generic Field value is now “Yes” for the parent resource. Its availability shows 0h/d which means “unlimited” or “not defined”.

The Availability field format is set to “Parent”. If you change it to “SUM”, the availability will read 16h/d, but here again, this is just a display option and you do not really have 16h/d of Mechanical Engineers.

In the Gantt Chart, no individual resource is assigned.



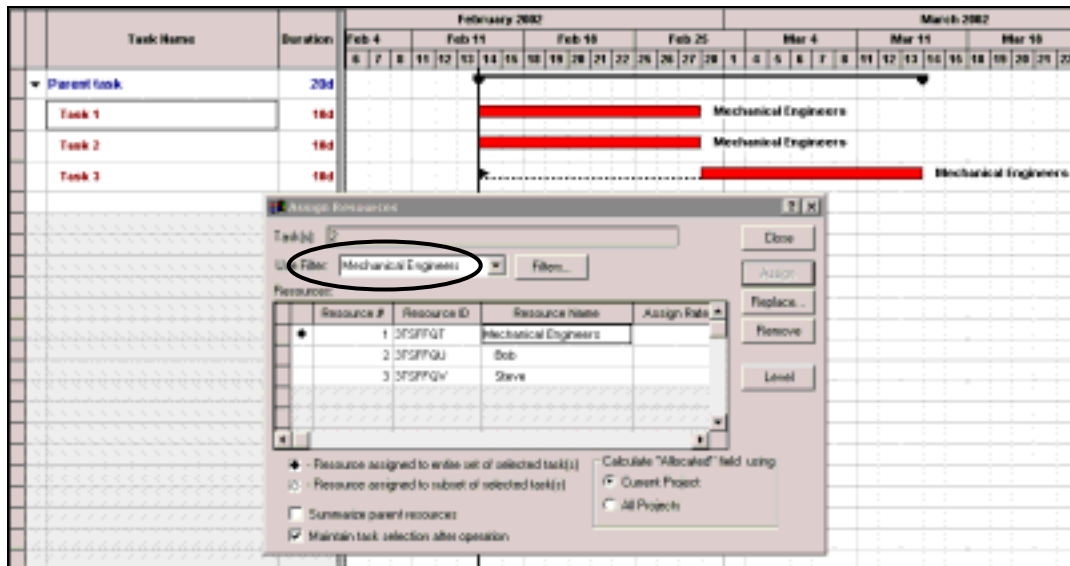
If you run the resource leveling tool without checking the “Enable generic resources in leveling” option, nothing will change since the availability of the parent resource is 0h/d. If you check the option, PS8 will now take into account the global availability including the parent resource and the individuals (16h/d).



Once the plan has been leveled (CPM) or resource contentions have been broken (CCPM), you can use the replace resource function of PS8.

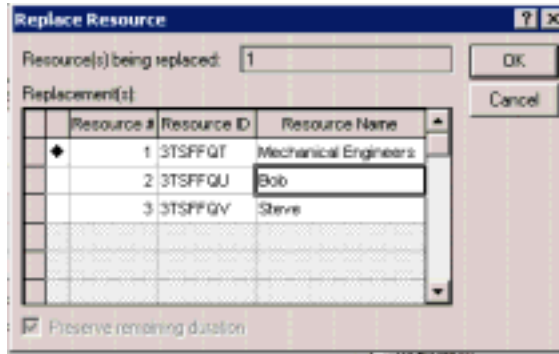
In the Tools menu, select the Assign Resources... Dialog box.

Here again, the resource filter can be very helpful if you deal with a large number of resources.



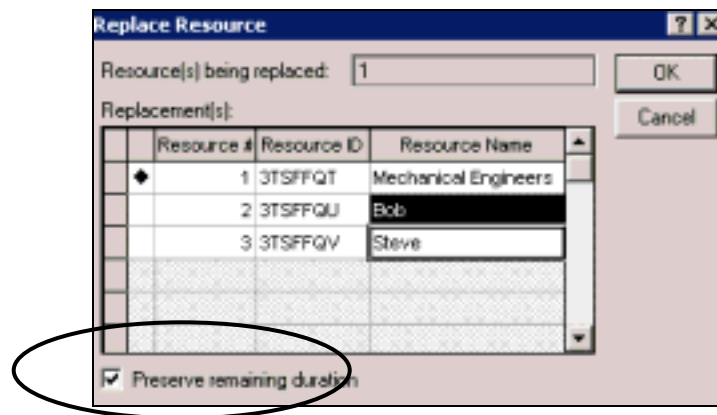
To replace an existing assignment, Select the task(s) with the existing assignment to be replaced, Select the resource to be replaced in the Assign Resource Dialog and click the Replace button.

Note that the Replace button will only be active if you task selection match the resource selection.



In the Replace Resource Dialog, select the replacement resource. PS8 will maintain the exact assignment profile you defined on the generic resource. For instance, if you assigned the Mechanical Engineer in a Effort distribution type with a Total unit of 45.2 hours, PS8 apply this same value to the new assignment.

The Replace function also allows you to replace one assignment with multiple resources. In this scenario, you can choose to Preserve the Remaining Duration (default option) or to have PS8 recalculate this duration.



If Preserve Remaining Duration is selected, PS8 will split the Total units between the new assignments and adjust the rates accordingly.

If Preserve Remaining Duration is not selected, PS8 will use the full Rate of the resource assignment and therefore recalculate a new duration for the task.

We invite you to play several what-if scenario to gain control of this helpful function of PS8.

One final note on this: PS8 will not replace a resource if there is a Baseline or any actual data for the assignment.

4. Scenario 3: Using a combination of Generic and individual resources

In this last case, we want to use a mixture of identified individuals and generic resources. The reasons might be that you know that certain tasks can be accomplished by only certain people and the other tasks will be done by whoever is available, or you simply don't know yet the name of the resource(s) who will be staffed for the project. So, our Resource table now looks like this:

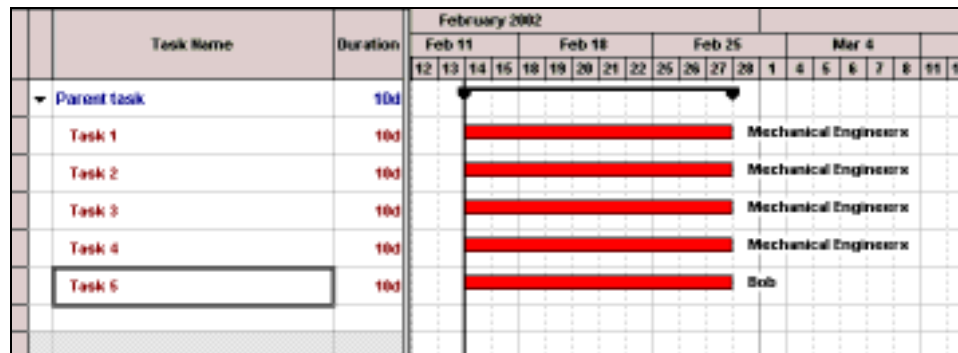


Resource #	RBS Code	Resource Name	Type	Availability	Generic	Default Rate
1	ME	Mechanical Engineers	LABOR	24h/d	Yes	8h/d
2	ME1	Bob	LABOR	8h/d	No	8h/d
3	ME2	Steve	LABOR	8h/d	No	8h/d

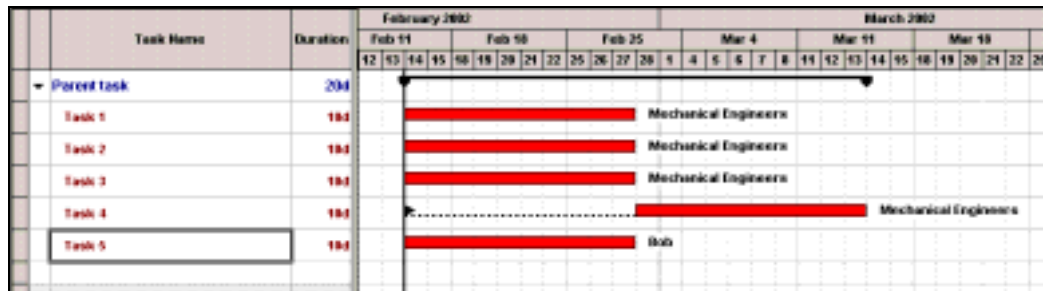
We have 2 identified resources and 3 resources in the budget. We don't know them yet, but we can count on them for planning the project.

Our total "workforce" is 48h/d. If we were changing the formatting of the Availability field format, we would read 48h/d

Our simple project now have 2 additional tasks:



If you run the resource leveling tool without checking the "Enable generic resources in leveling" option, you will get the following results since you do not have enough capacity in terms of generic mechanical engineers.



If you undo this last operation and run the leveling tool again, this time with the "Enable generic resources in leveling" option, nothing will change since your total capacity is greater than the total demand in this example.