# Assigning Cost Resources to Tasks in Microsoft Project

Assigning cost resources to a task and tracking them is quite tricky in Microsoft Project. If you add a Work resource and a Cost resource to the same task, updating the percent completes only updates the cost of the Work resource. Let's take a look.

I have here a '*Training*' task, assigned to Tom Henry (Work resource) and Room 1 (Cost resource).
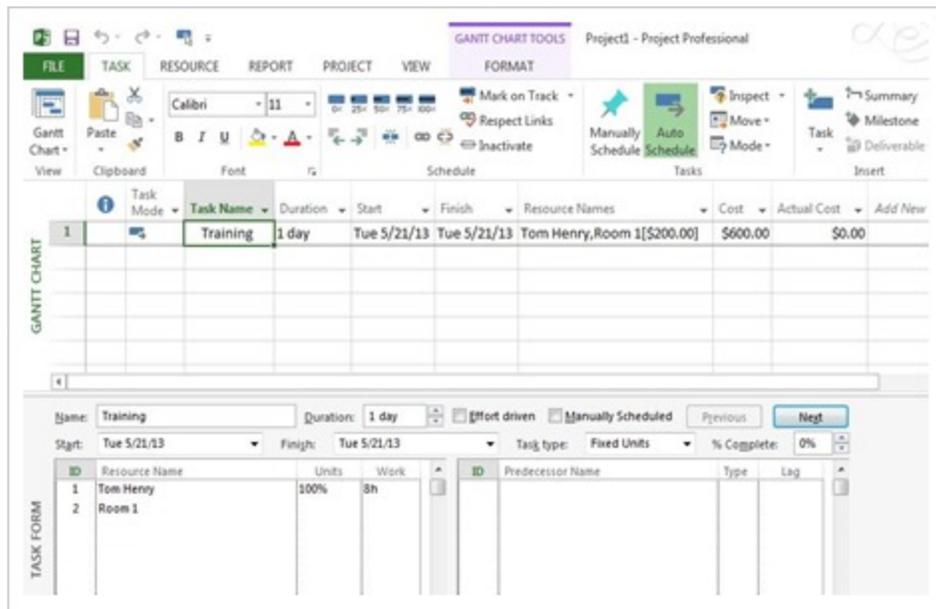
In the 'View' ribbon and in 'Resource Views' section, click on 'Resource sheet'.

Tom Henry is a **Work** type resource with a rate of $50/hr. Room 1 is a **Cost** type resource and Microsoft Project does not provide any editable *cost* cells for these types of resources.
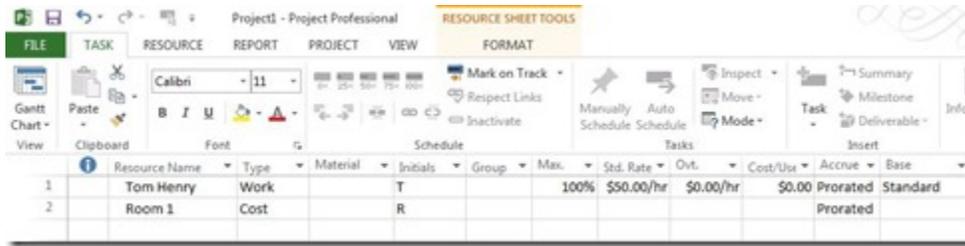
To enter the cost, under the 'View' ribbon and in the 'Task Views' section, click on the Gantt Chart view.
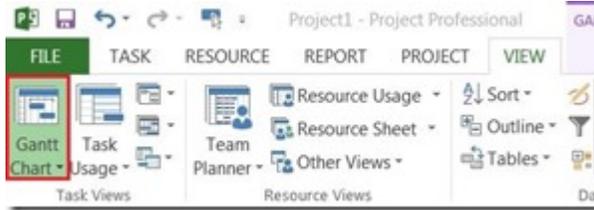

Double click on the task to bring up the 'Task Information' dialog box. Now in the 'Resources' tab, enter the cost for the resource, Room 1.
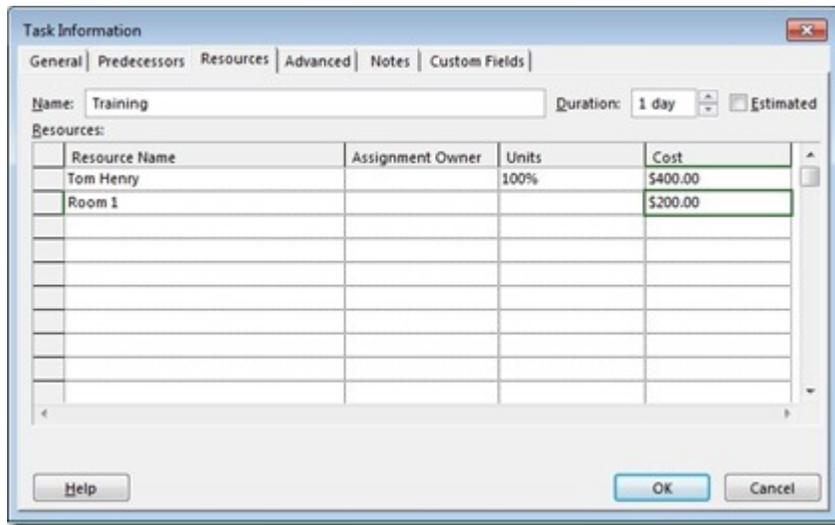

The planned cost for this task now is: $400 + $200 = $600.

In the Task Ribbon, and the Schedule section, I went ahead and updated the task to 50% complete.
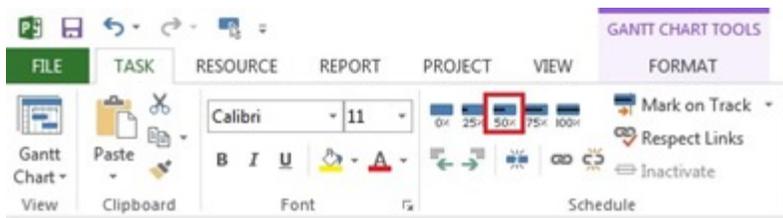
Observe the Actual Cost column. For 50% completion, the task has accumulated $200.
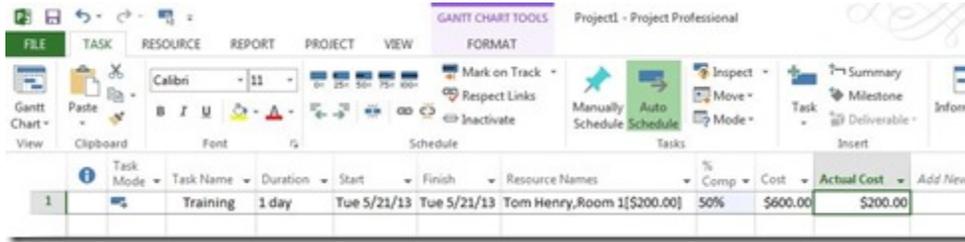
Similarly when the task is updated to 100%, 'Actual Cost' only shows $400 which comes from the Work resource. Where did the $200 from the Cost resource go?
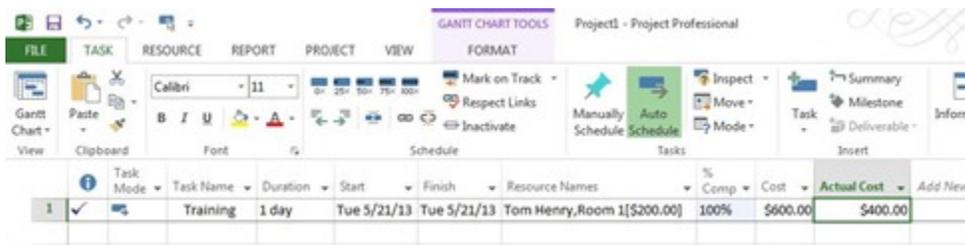
According to Microsoft, cost resources do not depend on the amount of work done on tasks, so when you have a task that has a Work resource and a Cost resource assigned to it, information of the cost resource does not update as expected. However, when you create schedules, there are tasks that need to have a cost resource assigned to it. So, how do you go about entering these costs? Ben Howard in his article, Using Cost Resources: Best Practice, describes a good way to address this issue. He suggests creating a separate task to track Cost resources, which works well.

Dabbling with Microsoft Project and from the training I received while interning at EPMA, I've stumbled on a few other ways this cost can be accounted for which I would like to share.

Option 1: _Add the cost resource to its summary task._

Resources in general should not be assigned to summary tasks but cost resources and budget cost resources are an exception.

(*If you are following along in Project, mark the task 0% complete and remove the cost resource 'Room 1' from the 'Training' task).*

Add a summary task, '*Day1*' here, and assign *'Room 1'* to it. You will have to double click on the summary task to bring up the 'Task Information' dialog box and assign the $200 value like we did earlier.

Go to the Task ribbon again and make updates to the '*Training'* task.

Updating to 50% complete shows $300 accrued. ($200 from the Work resource and $100 from the Cost resource. Both the resources are "prorated" which is why the cost updates incrementally)

Updating to 100% complete accrues the $600 cost correctly.

As you can see the cost resource values are also accrued to the task as it is being updated. Depending on how cost is accrued (Prorated, Start, End), the updates will be done accordingly. The drawback to this method is that you can't easily track individual task costs when you have multiple tasks, with cost resources assigned, under a summary task.

Option 2: *Manually enter cost through the 'Assignment Information' dialog box.*

(*If you are following along in Project, outdent 'Training' task and delete 'Day1', then assign Cost resource 'Room 1' to 'Training').*

In the 'View' ribbon, and in the 'Task Views' section, click on Task Usage.
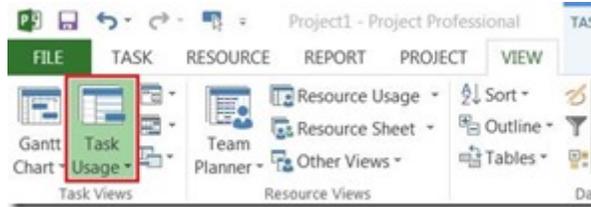
Double click on the cost resource *'Room1'* to bring up the 'Assignment Information' dialog box.

Under the 'Tracking' tab enter the amount in the 'Actual cost' cell.
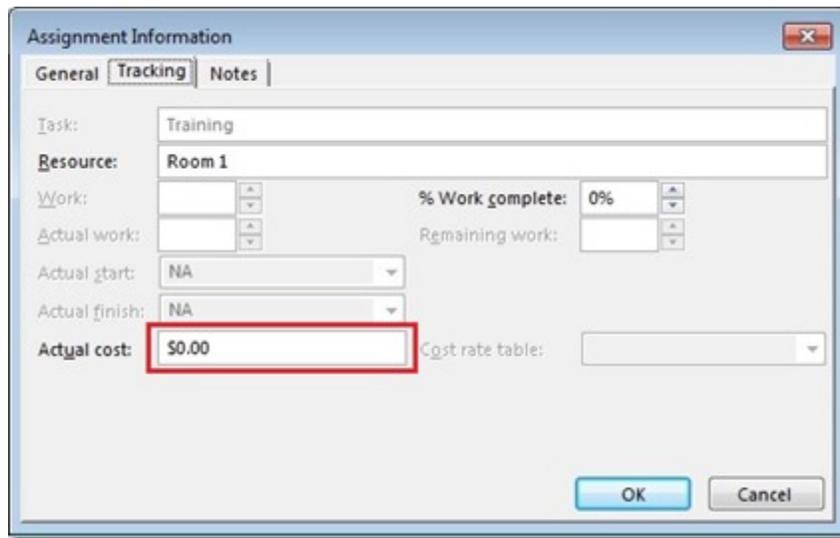
Update the Task completion to 50% and 100% and observe the changes. The $200 cost resource is now included in the cost calculation of this task.

Updating to 50% complete shows $400 accrued.

Updating to 100% complete accrues the $600 cost correctly.
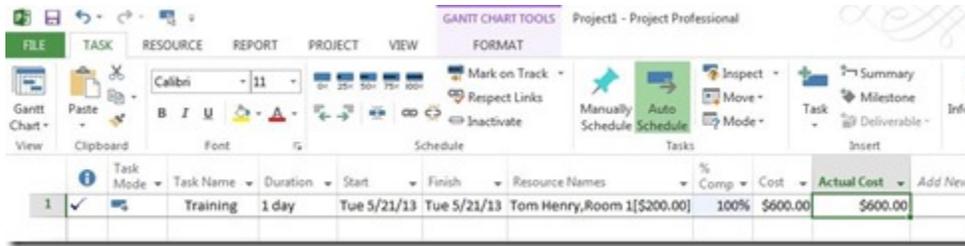
Option 3: _Enter actuals in Task Usage._

(*If you are following along in Project, revert back to the beginning where the 'Training' task has the Work resource and the Cost Resource assigned without any value. If that's confusing, alternatively you can create a new task 'Training 2' and assign a Work resource and a Cost resource to it*).

In the "Task Usage" view, scroll to the resource in the 'time-phased' section. Right click anywhere in the time-phased section and click on 'Actual Cost' which will appear as a new row and enter the cost in the appropriate cell.
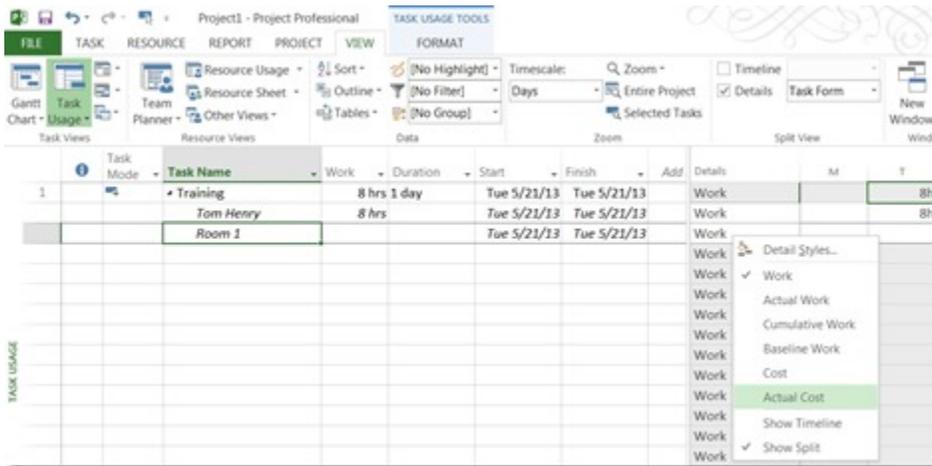
In the Actual cost cell for Room 1, enter '$200'
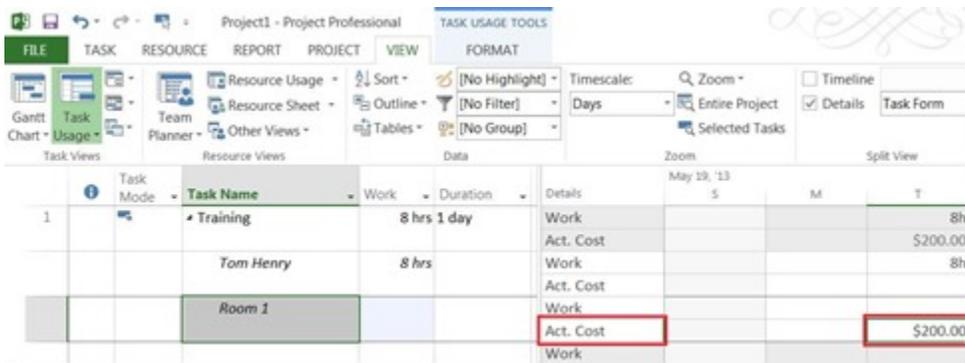
Switch to the Gantt Chart view, the $200 charge for Room1 is now recorded in the Actual Cost column. Updating the task completion should now shows costs incurred as expected.

Updating to 50% complete shows $400 accrued.

Updating to 100% complete accrues the $600 cost correctly.

Now you have several different options to address how you would like to add Cost resources in conjunction with Work resources to tasks in Microsoft Project.