INF09101 Project Management for Information Systems

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Lab 6: Tracking progress on your project

So far, the labs have focused on project ***planning*** i.e. developing and communicating the details of a plan before actual work begins. When work begins on the project, the next phase of project management is ***tracking*** progress. Tracking means recording details (or ***actuals***) about who did what work, when the work was done, and at what cost. Tracking actuals is essential to managing a project. The project manager must know how well the team is performing and when to intervene. By tracking project performance and comparing it with the original plan (saved in a ***baseline***) the progress of tasks, allocation of resources and costs can be checked.

You won't be able to track progress on your coursework plan as it doesn't start until after the contract is awarded but this exercise will let you see how to do this so that you get a complete view of the project management process.

To try out the exercises in this lab, make a copy of your plan and add some preparatory tasks (a major task 'Pre-Project Planning' and create some sub-tasks for preparing your proposal and putting the project team together). You can now use this plan to track progress you have already made on these tasks. You could include these in the final plan too but they are not part of the 12-week project.

In this lab exercise you will learn about tracking:

- Project work as scheduled.
- Each task's percentage of completion, either at precise values or at pre-set increments such as 25, 50, 75, or 100 percent.
- The actual start date, actual finish date, actual work, and actual and remaining duration for each task or assignment.

<u>Saving a baseline of your plan</u>

After developing an initial plan, one of your most important activities as a project manager is to record actuals and evaluate project performance. As you record actuals or update your plan, the original plan will probably change. This makes it difficult to keep track of the plan in its original state. To judge project performance, you'll compare the performance with your original plan, or ***baseline.*** A baseline is a collection of important schedule, cost, and work values. In this exercise, you will save the current state of your schedule as a baseline and then view the baseline task values.

1. On the **Project** tab, in the **Schedule** group, click **Set Baseline**, and then click **Set Baseline**. The Set Baseline dialog box appears. You'll set the baseline for the entire plan by using the default settings of the dialog box.
2. Click **OK**. MS Project saves the baseline. There is no indication in the Gantt Chart view that anything has changed. You will see some of the changes caused by saving the baseline shortly.

[TIP **-** When working with a plan that includes a saved baseline, you can see when the baseline was saved in the **Set Baseline** dialog box. The date the baseline was saved appears after the baseline name in the **Set Baseline** field.]

3. On the **Task** tab, in the **View** group click the down arrow below **Gantt Chart**, and then click **Task Sheet**. The Task Sheet view appears. Because this is a tabular view, it does not include the Gantt chart, so more room is available to see the fields in the Entry table.
4. Now you'll switch to the Variance table in the Task Sheet view. The Variance table is one of several predefined tables that include baseline values. On the **View** tab, in the **Data** group, click **Tables**.
5. In the listed tables, note the check mark next to Entry. This means that the Entry table is currently displayed in the Task Sheet view. You'll switch to another table next. Click **Variance**.

   [TIP - You can also right-click the Select All button in the upper-left corner of the active table to switch to a different table.]

6. The Variance table appears. This table includes both the scheduled and baseline start and finish columns, shown side by side for easy comparison.

   Because no actual work has occurred yet and no changes to the scheduled work have been made, the values in the Start and Baseline Start fields are identical, as are the values in the Finish and Baseline Finish fields. After actual work is recorded or later schedule adjustments are made, the scheduled start and finish values might differ from the baseline values. You would then see the differences displayed in the variance columns.

7. On the **View** tab, in the **Task Views** group, click **Gantt Chart**. The Gantt chart view appears.

   [TIP – MS Project includes views that compare the current schedule to the baseline, but here's one quick way to see baseline values in the Gantt chart view: on the Format tab, in the Bar Styles group, click Baseline and then click the baseline (Baseline or Baseline1 through Baseline10) that you want to display. MS Project draws baseline Gantt bars for the baseline you choose.]

   Now that you have some baseline fields, you will enter some actuals.

   <u>Tracking a plan as scheduled through a specific date</u>

8. On the **Project** tab, in the **Status** group, click **Update Project**. The Update Project dialog box appears.
9. Make sure the **Update work as complete through** option is selected.
10. In the adjacent date box, type or select **<today's date>**.
11. Click **OK.** Project records the completion percentage for the tasks that were scheduled to start before the date entered. It displays that progress by drawing *progress bars* in the Gantt bars for those tasks. Check marks appear in the Indicators column for tasks that have been completed. Progress bars indicate the portion of each task that has been completed. In the chart portion of the Gantt Chart view, the progress bar shows how much of each task has been completed.
12. Save the plan.

Entering a task's completion percentage

13. Enter 50% completion of a subsequent uncompleted task on your plan: right click on the task and select 50% from the menu. This indicates that work has started but the task is not complete.
14. Save the plan.

Entering actual values for automatically scheduled tasks

A more precise way to keep your plan up-to-date is to record what actually happened for each task in your project. You can record each task's actual start, finish, work, and duration values. *Example*: when you enter 3 days of actual duration on a task with 5 days of scheduled duration and 40 hours of work, MS Project calculates the actual work to be 24 hours, the percent complete to be 60%, and the remaining duration to be 2 days. MS Project will use the actuals to change the plan but the original baseline will not be altered. In this exercise, you record actual work values for some tasks, as well as actual start dates and durations for other tasks.

15. On the **View** tab, in the **Data** group, click **Tables** and then click **Work**. The Work table appears.

    [TIP - You can display whichever table is most relevant to the details you are focused on while tracking progress in a plan. Useful tables include the Work table, which focuses on work values, and the Cost table, which focuses on cost values. The Tracking table is a good all-around table when recording or viewing progress.]

16. If needed, drag the vertical divider bar to the right to expose the last column in the Work table, **%W. Comp** (% Work Complete). This table includes both the total scheduled work (labelled Work) and Actual and Remaining work columns. You'll refer to the values in these columns as you update tasks. You can enter more actual time than planned time to show that a task took longer than expected or you can show that the actual time is less than the planned time to show the task is not yet complete.
17. In the Actual field for one of your automatically scheduled tasks, type or select a number that is greater than the originally scheduled hours (visible in the tasks' baseline field), and then press Enter. MS Project records that more hours of work have been completed on this task by extending the Gantt bar of the task to indicate its longer duration. It may be the case that the Planning Wizard highlights a scheduling conflict as a result of the change, particularly if a fixed milestone or deadline is affected and so you may need to make further adjustments to compensate for this in your plan).
18. In the **Task Name** column, click on a different automatically scheduled task and show that it started one working day ahead of schedule (the day before its scheduled start date) and took an extra day to complete. You will record this information in the Update Tasks dialog box.
19. On the **Task** tab, in the **Schedule** group, click the down arrow to the right of the **Mark on Track** button, and then click **Update Tasks**. The Update Tasks dialog box appears. This dialog box shows the actual and scheduled (or current) values for the task's duration, start, and finish, as well as its remaining duration. In this box, you can update the actual and remaining values.
20. In the **Start** field in the **Actual** group on the left side of the dialog box, type or select a date.
21. In the **Actual Dur** field, type a duration (i.e. the number of working days not calendar days). MS Project assumes that the task started as scheduled (as this was not manually specified). This may extend the scheduled finish date. Manually scheduled tasks can also be changed (actual start, actual finish, and remaining duration value). Click **OK.**
22. Save and close the file.