

Ask the Experts: September, 2009

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Topic: Start after a date and end before a date - Applying 2 constraints on 1 task

Adenor from Oakbrook, IL asks: I have a task in a schedule that must start after an unknown date and must end on a specific date. I have tried to enter and start and finish date on the task but it doesn't seem to be working for me. After the task starts it will take 9 days including weekends. How can MS Project schedule this task for me?

Answer: MS Project can do this for you but it takes a few tips and steps to make it work. Let's take your problem one step at a time:

The need for a start and a finish date:

Since you can't enter both a start and a finish date on a task you can enter a start no earlier constraint date to push the task forward in time and a deadline. This will give you the ability to start the task after some date in the future and have a target for the ending date of the task.

To enter these values and dates:

1. Double click on the task
2. Select the Advanced tab
3. Enter the deadline date
4. Select the Start no Earlier than Constraint
5. Enter the constraint date— put a date sometime in the future when you think it might start.
6. Click OK

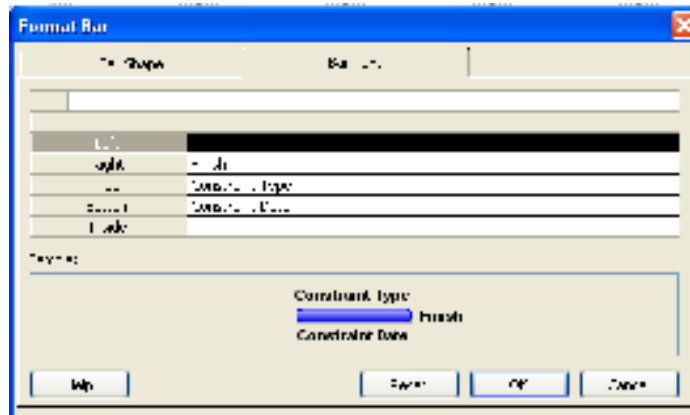
See the example below of how it would look with both constraints applied to a task:



In this example I have also changed the Gantt chart to show the start no earlier date below the Gantt bar for the task, the constraint type above, the finish date to the right as well as the deadline date to the right of the deadline on the task.

To create this formatting:

Right click on the Gantt bar for the task and select Format Bar then select the settings you see in the form below. Using this method you would make changes on a Gantt chart for a single task bar. As you can see in the form below, enter on the line for "right" the "finish" field, "top" is "constraint type" and "bottom" is constraint date.



The deadline date was added by: Format → Bar styles → Deadline → Text (in the bottom part of the form) → Deadline → OK. This is a change that will affect all deadlines applied to this Gantt view.

If the date format is not what you would like you can make changes in Format → Layout.

The second part of your question asks about showing the task as 9 days including weekends after it starts. When duration is in days (or any other value) is entered, the system is looking at the project calendar and using availability according to that calendar. Typically, business days this does not include weekends. This can be overridden so the task will use physical number of days – working and non-working days. The feature is called elapsed time. Enter the duration as 9 ed instead of 9d and physical days will be counted. See the comparison example below:

| ID | Code | Duration | Start Date |
|----|------|----------|------------|
| 8 | C | 9 days | 9/21/09 |
| 9 | D | 9 edays | 9/21/09 |

When the task starts to execute I would recommend entering the actual start date and you will see how it compares against the deadline date and to move it forward to reflect what actually occurred. Your goal will be to not let the end of the task cross the deadline.

My recommended steps to schedule the task to fit your needs is:

- Enter a start no earlier constraint
- Enter a deadline for the task
- Enter the duration using elapsed time (9 ed) to get physical days
- Enter the actual start date of the task
- Make sure that the end of the task does not cross the set deadline