99 Tricks and Traps for

Microsoft® Office Project

Including Microsoft® Project

2000 to 2007

The Casual User's "Survival Guide"

By

Paul E Harris

of

Eastwood Harris Pty Ltd

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1 IMPORTANT THINGS

Readers of this book should be familiar with:

- The basic functions of Microsoft Project and
- The theory of Critical Path including Early dates, Late dates and Float calculations. Microsoft Project uses Slack for term Float.

Microsoft Project has functions that catch out users. You should understand these functions and be able to identify when they have been used inadvertently.

1.1 The "Delete" Key

Striking the delete key will delete data without warning. So keep your fingers away from it. I usually place the Tasks ID in the description of the last task so I know if I have deleted a task in error.

1.2 Typing a Date or Dragging a Task Sets a Constraint!

Functions that set a task constraint without warning::

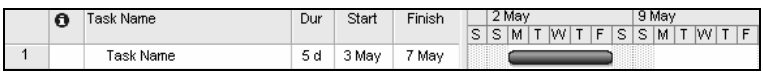
- Typing or selecting a start date in a **Start** date field will set a **Start No Earlier Than** constraint
- Typing or selecting a finish date in a **Finish** date field will set a **Finish No Earlier Than** constraint
- Dragging a bar in the Gantt Chart View will set a **Start No Earlier Than** constraint

Note: You need to be very careful when dragging tasks or typing into date fields as this will set a constraint and the tasks will not move forward in time when predecessors are removed.

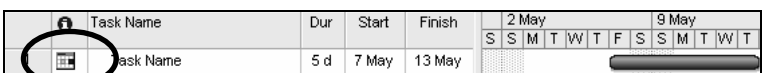
1.3 Indicators Column

The **Indicators** column is a very useful feature that specifies when a task has an attribute that is different from a normal task created by inserting a new task. The indicators column will display a constraint icon when a constraint has been set:

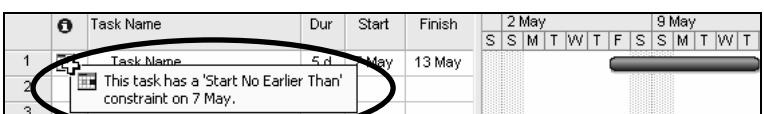
- Before entering a date in a Start or Finish field or Dragging a Task, the indicator column is blank:



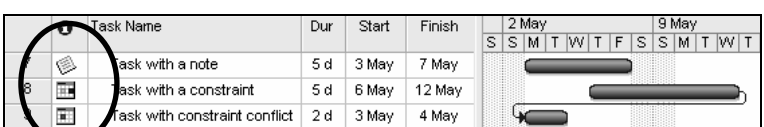
- After entering a date in a Start or Finish field or Dragging a Task, a constraint is set. There now is a Constraint indicator in the Indicator column:



- A note displays when the indicator field has the mouse pointer placed over the indicator cell:



- The indicator column shows a different icon when tasks have Notes, Task Calendar or a Constraint conflict causing Negative Float (Slack):



Note: No indicator is displayed with a Deadline Date, unless Negative Float is created.

1.4 Why Are Tasks Scheduled before the Predecessors?

There are a couple of reasons why tasks would be displayed before a predecessor relationship would allow them to be scheduled:

- An **Actual Start** date has been set, or
- **Tasks will always honor their constraint dates** is set and a task has been assigned Late constraint.

1.4.1 Actual Start Date

You may have assigned an Actual Start to a task by entering a date in the Actual Start field or entering a % Complete.

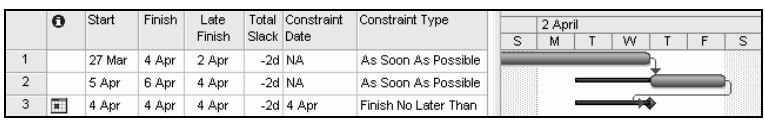
- Once an Actual Start Date has been set a predecessor relationship does not affect the Actual Start date.
- A predecessor relationship may cause an in-progress Task with an Actual Start date to split when the **Tools**, **Options...**, **Schedule** tab **Split in progress tasks** option has been checked.

1.4.2 Tasks Will Always Honor Their Constraint Dates

There is an option in the **Tools**, **Options...**, **Schedule** form titled **Tasks will always honor their constraint dates**. This option allows a task to be scheduled before the predecessors when the successor has a **Finish no later than** or **Start no later than** constraint. In effect, this option will make all constraints override relationships.

For example, a task with a **Must Start On** constraint, which is prior to a predecessor's Finish Date, will display an Early Start on the constraint date and not the scheduled date. The **Total Slack** may not calculate as the difference between Late Start and Early Start. Examine the following two examples with the option box checked and unchecked:

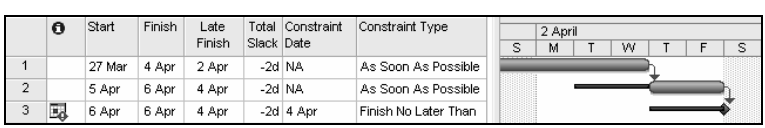
- Tasks will always honor their constraint dates: option box checked:



		Start	Finish	Late Finish	Total Slack	Constraint Date	Constraint Type
1		27 Mar	4 Apr	2 Apr	-2d	NA	As Soon As Possible
2		5 Apr	6 Apr	4 Apr	-2d	NA	As Soon As Possible
3		4 Apr	4 Apr	4 Apr	-2d	4 Apr	Finish No Later Than

Task 3 starts before the predecessor finishes and the total slack of the second task is calculated as -2 days, which is not the difference between the Early Finish and the Late Finish. This constraint does not adhere to commonly accepted Total Float calculations.

- **Tasks will always honor their constraint dates**: option box NOT checked and the Total Float is calculated correctly:



		Start	Finish	Late Finish	Total Slack	Constraint Date	Constraint Type
1		27 Mar	4 Apr	2 Apr	-2d	NA	As Soon As Possible
2		5 Apr	6 Apr	4 Apr	-2d	NA	As Soon As Possible
3		6 Apr	6 Apr	4 Apr	-2d	4 Apr	Finish No Later Than

It is suggested that this option is NEVER switched on, as the schedule may appear to be achievable when it is not.

1.5 The Logic Keeps Changing!

The logic will change if a task is dragged to another position when **Autolink inserted or moved tasks** option is turned on.

This option is intended to be used to automatically link new inserted tasks with a predecessor to the task above and a successor to the task below.

The downside of this function is that when the task is moved this function will change the existing predecessors and successors of the:

- Moved task,
- Original tasks that were above and below the moved task, and
- New tasks that are now above and below the moved tasks.

This function will potentially make substantial changes to your project logic and may affect the overall project duration. It is suggested that this option is **NEVER** switched on, as dragging an activity to a new location may completely change the logic of a schedule without warning.

Select **Tools**, **Options...**, **Schedule** tab and uncheck **Autolink inserted or moved tasks**.

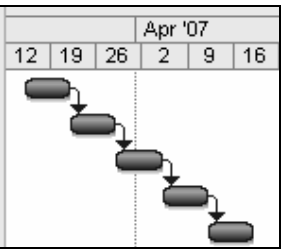
1.6 The Project Will Not Open!

Microsoft Project 2007 has a new file format that may not be opened with Microsoft Project 2000-2003. Microsoft Project 2000-2003 format may be saved from Microsoft Project 2007.

An example of this process is shown below:

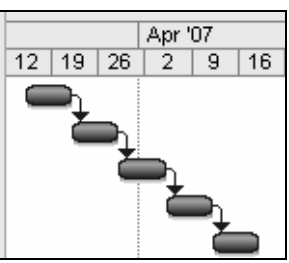
- Original Logic:

	Task Name	Duration	Predec-essors	Succ-essors
1	A	5 days		2
2	B	5 days	1	3
3	C	5 days	2	4
4	D	5 days	3	5
5	E	5 days	4	



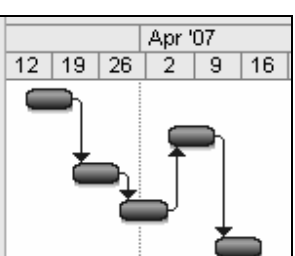
- Task D dragged with **Autolink inserted or moved tasks** checked. Note the logic has changed on many tasks:

	Task Name	Duration	Predec-essors	Succ-essors
1	A	5 days		2
2	D	5 days	1	3
3	B	5 days	2	4
4	C	5 days	3	5
5	E	5 days	4	



- Task D dragged with **Autolink inserted or moved tasks** unchecked. The logic has not changed:

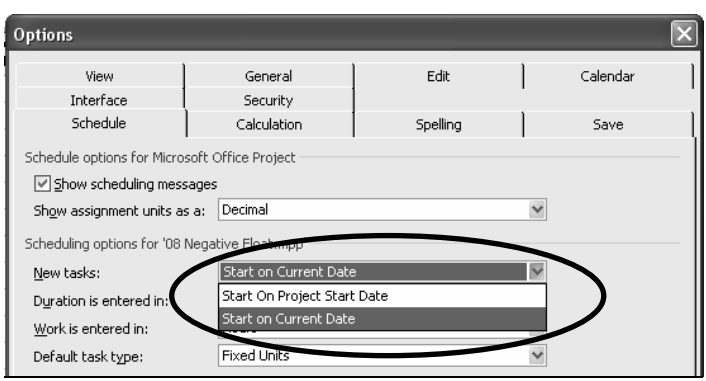
	Task Name	Duration	Predec-essors	Succ-essors
1	A	5 days		3
2	D	5 days	4	5
3	B	5 days	1	4
4	C	5 days	3	2
5	E	5 days	2	



1.7 Why Do New Tasks Have an Early Start Constraint?

Unlike other scheduling software, Microsoft Project normally ignores the Status Date when calculating a progressed schedule. It schedules tasks without an Actual Start or predecessors or constraints on the Project Start Date, or as close to the Project Start Date as calendars permit. It does not commence the incomplete portions of Tasks after the Status Date. The **Tools**, **Options...**, **Schedule** tab has a **New tasks:** option of either:

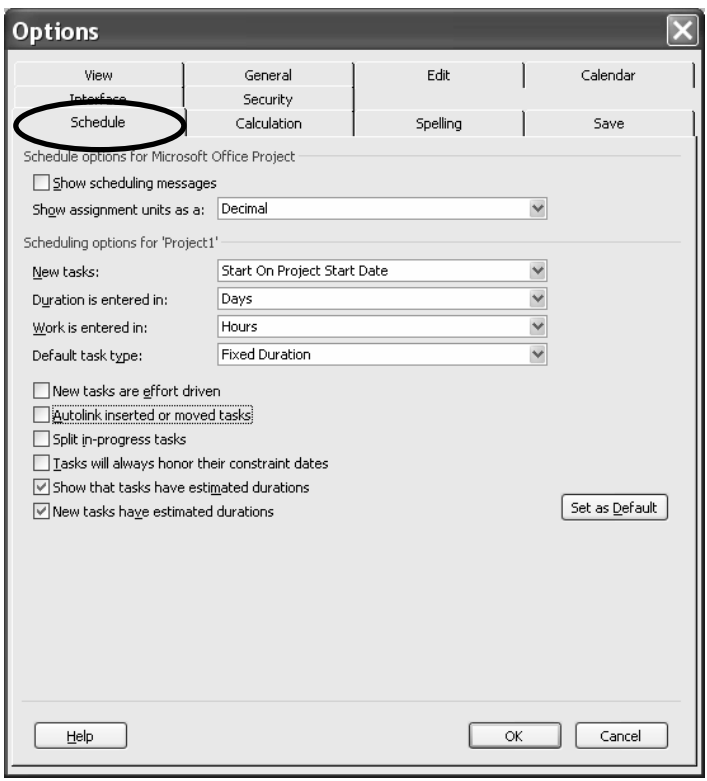
- **Start on Current Date**, or
- **Start on Project Start Date**.



- When set to **Start on Current Date**, new tasks are created with an **Early Start Constraint** set to the **Current Date**.
- When set to **Start on Project Start Date**, new tasks are created without a constraint. When the **Autolink inserted or new tasks:** is switched off all new tasks will schedule on the Project Start Date.

1.8 Recommended Schedule Options

It is best to keep a schedule as simple as possible. I recommend that you consider the following Schedule Options as a good starting point if you have limited experience in scheduling software:



- The option of displaying a new task with a "?" after the duration is called an **Estimated Duration**. The default setting may be changed in the **Tools**, **Options...**, **Schedule** tab.

Note: Most of the other options are covered in this book.