

Oracle Primavera P6 Schedule Date Sets At-A-Glance

Understand P6 Schedule Date Fields

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Draft

Project Level	
	On Detail Window
Actual Start/Finish	Y
Anticipated Start/Finish	Y
Project Planned Start	Y
Must Finish By	Y
Project Forecast Start	
Forecast Start/Finish	
(Current) Start/Finish	Y
Data date	Y
Last Apply Actuals date	
Schedule Finish	

- Populated from Activity level
- See Note 2
- See Note 1
- See Note 1
- See Note 1.d
- See Note 1.c
- Populated from Activity level
- Self-explanatory
- Self-explanatory
- See Note 1.b

Activity Level	
	On Detail Window
Actual Start/Finish	Y
Anticipated Start/Finish	
Expected Finish	Y
Suspend/Resume dates	Y
Planned Start/Finish	
Remaining Early Start/Finish	
Primary Constraint date	Y
Secondary Constraint date	Y
(Current) Start/Finish	Y
Early Start/Finish	
Late Start/Finish	
Remaining Late Start/Finish	
External Early Start/Late Finish dates	

- See Note 3
- See Note 2
- See Note 6
- See Note 10
- See Note 5, 7
- See Note 5, 8
- See Note 11
- See Note 11
- See Note 3, 4, 5
- See Note 3, 5
- See Note 3
- See Note 8
- See Note 9

BL Project Start/Finish		• Populated from Activity level
BL1 Start/Finish		• Populated from Activity level
BL2 Start/Finish		• Populated from Activity level
BL3 Start/Finish		• Populated from Activity level

BL Project Start/Finish		• See Note 12
BL Project Actual Start/Finish		• See Note 12
BL Project Early Start/Finish		• See Note 12
BL Project Late Start/Finish		• See Note 12
BL1 Start/Finish		• See Note 12
BL2 Start/Finish		• See Note 12
BL3 Start/Finish		• See Note 12

	Editable by Users
	Not Editable by Users

1. a. When a new project is added using Wizard, the following date fields are asked to fill out:

• **Project Planned Start date (Project level)**

As it said, this is a planned start date and always subject to change later on. It is a better practice to match this date closely to the earliest date at activity level as the project details are developing. This date (short for PS in Timescale window) can also be used to draw the earliest border for bar chart view area. If this date is not updated diligently, view area will show either a gap or cut-off in the beginning of the view area.

• **Must Finish By (Project level)**

In normal case, leave this field blank. The date on this field once entered will be used as a project constraint date, which will cause misrepresented TFs easily.

b. Schedule Finish : (Project level)

- This date is rolled up from the Early Finish date of the latest activity in the project. It is only used at Project level.
- Note that this date is populated without considering the adjustment due to resource leveling.

c. Resource Leveler pair F - Forecast Start/Finish : (Project level)

- Although this pair of dates is editable on Projects view, they can't trigger any changes on the bar chart view area. They are not designed to be entered directly on the fields either. They work just as a meter behind the bar on Tracking view especially. These dates are reset

accordingly every time the project bars were dragged around in the bar chart view area and in turn, the resources are leveled in response. I will need to discuss this subject in more detail on another article. In short, these two dates are used for resource usage analysis only. Otherwise, not to show these dates on any reports as the term "Forecast Start/Finish" will mislead many people.

d. Resource Leveler PF - Project Forecast Start: (Project level)

- This date works exactly like Forecast Start/Finish dates as mentioned above. The only difference is Project Forecast Start is depicting "the start date of the entire project", while Forecast Start date is depicting "the start date of individual breakdown within a project". For example, if there are three WBS assigned within a project, each bar will represent a WBS. Forecast Start date of each bar will change differently if only one bar is dragged around. However, the Project Forecast Start date for each WBS will move altogether and show the same date!

2. Temporary Place Holder pair An - Anticipated Start/Finish dates : (Project / Activity levels)

- At Project level, when a new project is added under EPS node, users can enter project start and finish dates on this set of dates so that the bar will show up. Once the detailed activities are developed, the Start/Finish dates from Activity level will be rolled up to their matching summary level fields and reset the bars instantly. Anticipated Start and Finish dates are no longer driving anything even the entries are still shown.
- Anticipated Start/Finish dates are not accessible at Activity level.

3. Old Three pairs to New Four pairs - Actual Start/Finish, Early Start/Finish, Late Start/Finish and (Current) Start/Finish dates : (Activity level)

- There are four core pairs of dates in P6 now. They are functioned just like three core pairs of dates from old P3. There are some slight deviation on the definitions, which causing a little bit confusion during transition. Just remember that Start/Finish actually inherits the old format of P3 Early Start/Finish, while Early Start/Finish and Late Start/Finish dates in P6 will not show Actual dates. P6 Early Start/Finish dates are not the same as P3 Early Start/Finish dates!

4. One and Only pair - (Current) Start/Finish dates : (Activity level)

- The inputable operation on Activity Detail window is for inputting Actual Dates (Make sure to check Started/Finished fields). Otherwise, the inputted dates won't stay after schedule calculation.
- This pair of dates along with Original Duration, Remaining Duration, Physical %, and Total Float is standard columns shown on most schedules.

5. **Four Horsemen Start dates - Planned Start / Early Start / (Current) Start / Remaining Start : (Activity level)**

When an activity has no progress: (All calculated start dates are the same.) Every time a schedule is calculated, it will

- Set Planned Start date = Early Start date &
- Set both (Current) Start date and Remaining Start date = Planned Start date

An activity with progress: (When an Actual Start date is entered)

- Set (Current) Start date = Actual Start date
- Planned Start date keeps the last date before Actual date is entered. Users can change Planned Start/Finish dates.
- Every time a schedule is calculated, Early dates will be calculated and will set Remaining Start date = Early Start date. Users can change Remaining Start/Finish dates.

6. **Update Time Saver XF - Expected Finish date : (Activity level)**

- Make sure to check the option of "Use Expected Finish Dates" by **Tools>Schedule>Options**. Hot key - **F9** if you are using this field to update the schedule.
- Make sure to enter Actual Start date before enter an Expected Finish date otherwise Original Duration may be messed up! If you have a resource assigned to the activity and you did not check on "Drive Activity Date".
- If you input an Expected Finish date early than the to-be-Data date, no dates will be changed.

7. **Manipulator pair P - Planned Start/Finish dates : (Activity level)**

As mentioned above, Planned Start/Finish dates are populated according to the rules mentioned at Note 5. However, users can always change those dates. Here are the rules based on my experiences:

- For a completed activity, changing Planned Start/Finish dates neither will not change Actual Start/Finish dates nor move the bar. However, it will change Original Duration! A terrible consequence! Those dates will stay after schedule calculation.
- Actually, even for an activity with no progress, changing Planned Start/Finish dates will change Original Duration and move the bar (due to changed OD). The changes will become permanent after calculating due to the changed OD!
- For a started activity, changing Planned Finish date will change Original Duration too. However, the Remaining Duration stays the same. Therefore, the Start/Finish dates of all remaining activities stay unchanged. Activity bars stay the same too. Here is what gets messed up totally - After calculating schedule, the Planned Start/Finish dates of the remaining activities will be set to Early Start/Finish dates. So if a

progressed activity planned finish date is moved forward or backward, the progressed activity will have either a gap or overlap with the successors, which violates CPM algorithm - Logic is not driving dates!

- Bottom line is to stay away from editing Planned Start/Finish dates!

8. Manipulator pair RE + Innocent RL - Remaining Early Start/Finish and Late Start/Finish dates : (Activity level)

- By definition, they are similar to Early Start/Finish and Late Start/Finish calculation. However they are calculated based on Remaining Durations.
- Remaining Late Start/Finish dates are not editable while Remaining Early Start/Finish dates are. However, changing Remaining Early Finish dates will change Remaining duration just like Planned Finish date doing to OD and it will change schedule permanently after calculation!
- Changing Remaining Early Start date will impose a "Start On or After" constraint date on the activity.
- Remaining Early Start/Finish and Late Start/Finish dates will be blank for all completed activities. As mentioned above, for all activities with no progress, Remaining Early Start/Finish dates are set to be Planned Start/Finish dates and in turn, Planned Start/Finish dates are set to be Early Start/Finish dates if no manual input on Planned dates by users. Note that all user editable date fields are for Early dates only and affecting forward pass calculation primarily. Backward pass calculation can also be affected by changed ODs or RDs due to manual changes either on Planned Start/Finish dates or on Remaining Early Start/Finish dates accordingly.
- Remaining Early Start/Finish dates are feeding to Timesheets module users.
- Bottom line is to stay away from editing Remaining Early Start/Finish dates!

9. Lost Connections pair X - External Early Start/Late Finish dates : (Activity level)

- This pair of dates is different from the other dates. Notice that they are Early Start vs Late Finish. They are appeared to be inputable, actually they are not. These fields are populated only during import. The External Early Start date is the earliest finish date of all lost external ties, and is used for forward pass calculation. The External Late Finish is the latest start date of all lost external ties, and is used for backward calculation.
- These dates are always blank whether there is a tie with external projects or not within your project database. There will a date shown when a project with external ties is imported into your database. These dates will be used in schedule calculation and will drive the schedule. Make sure to exam these two fields if you can't really figure out anything else making wield about the schedule. You can easily find those activities with external dates by using a filter to search all activities without any predecessors or successors.

10. Suspend/Resume dates : (Activity level)

- These dates are only functional after an Actual Start date is entered.

11. Primary/Secondary Constraint dates : (Activity level)

- Most users would not confuse Constraint dates with other date fields for the purpose of this article. However, I need to write another article to cover more detail about using constraint dates.

12. Various pairs of baseline dates : (Project / Activity levels)

- First, "Baseline" in P6 means "Target" in P3. Do not even confuse it with "Baseline" in scheduling spec, etc.
- In term of database design, I can imagine that P3's design for two schedule comparison is using external links between tables. On the other hand, since P6 stores all data in a huge database and designed for cloud implementation, the baseline (target) schedules have to be copied into the same table (so to speak, I believe it is more than one tables) for possible comparison uses. P6 can save unlimited number of baseline (target) schedules, depending upon Admin Preferences setting under Data Limits. The default is 500 maximum baselines per project. However, you can only assign 4 baselines for "direct" comparison uses. I think this is set up to speed up the application performance, and reduce the clusters of fields for selections.
- To properly manage baselines in P6, make sure going thru the steps of "Maintain" then "Assign" baselines. Those populated date fields for the four assigned baselines then will be copied under the field names with prefix - Projectxxxx, BL1xxxx, BL2xxx, and BL3xxxx accordingly, and the same for those fields at Project level. For the purpose of this article, I don't need to go into too much detail on this subject.
- Note that there is no so called Early or Late dates at Project level, just Start or Finish dates. This rule applies to all other date fields.

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