

TECH TIP



JANUARY 2020 ORACLE PRIMAVERA P6 USING STEPS TO CALCULATE % COMPLETE IN P6

Ninety percent completed. That same activity was 90% complete a month ago...and the month before that. From an accuracy perspective, it would be more precise to break the activity down further to show progress more granularly, but from a management and reporting perspective, it could make the schedule too large to manage.

The Steps feature in Primavera P6 allows each activity to include a list of tasks that outline the work to be performed to complete the activity. Many people use this as just a checklist to ensure all the pieces are accomplished. However, these "steps" can be used to calculate the Activity Percent Complete field based on their individual weighted value. This Tech Tip will show how to set up Steps and use them to update the project status.

Creating Project Steps

Steps can be added to an Activity on the Steps tab in the Details section of the Activities tab.



They can be added individually using the Add (A above) button or from a template (B). Using Add will open a new line where the name and weight values can be entered.

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Selecting Add from Template opens a window to select the Assign Activity Step Templates window to pick a pre-defined group of steps.

Assign Activity Step Templates		\times
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Search		
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🗾 Blue Line		Π.
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With the right permissions, Step Templates can be created in the Enterprise / Activity Step Templates window.





Establishing Weighted Values

Step Weights enable the scheduler to add more value to the completion of one step over another. If the columns in the Steps tab do not include Step Weight, Step Weight Percent, Step % Complete, or Completed, they can be added by right-clicking in the Steps window and selecting Customize Steps Columns.

HM - 1020 Yellow Lir	e Maintenance	80	80 06-08-26	09-29-2
RM - 1030 Grey Line	Maintenance	80	80 06-08-20	09-29-20
Clear ROW Vegetation		100	100 08-04-20	12-24-20
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407 - Dalton to Main	2.0	40.0	0%	Per
📕 411 - Main to Angel Cove	1.0	20.0	0% 📃	Kej.
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	Paste	Ctrl+V		
Add & Add from lem	Create Templat	e		
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The Step Weight is an estimated value of one step against another. The easiest way to envision this is to take the Step with the least value (effort or dollars) and then estimate how many times more each of the other Steps is worth.

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Activity RM - 1030	Grey Line Maintenance	e			
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403 - Riverside to Dalton 407 - Dalton to Main 411 - Main to Angel Cove	4.0 57 C 2.0 D 28 1.0 14	7.1 0 ¹ 3.6 0 ¹ 4.3 0 ¹	% % %	Repla	ace rails, ties,
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In the example above, the Step Weight (C) of Main to Angel Cove is the shortest amount of track and has the least amount of work to be performed. Dalton to Main is twice as big and Riverside to Dalton is four times bigger than Main to Angel Cove. The Step Weight Percent (D) is automatically calculated based on the weight percent of the total of the Step Weight values.





Changing the Calculations Settings

To calculate the Activity Percent Complete based on the Steps, the "Activity percent complete based on activity steps" setting must be selected in the Calculations tab of the Project Details area.

Primavera P6 Professional 18 : RAIL-2033 (Rail Maintenance Project)		- 🗆 ×
<u>File Edit View Project Enterprise Tools Admin Help</u>		
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📓 📄 RAIL-2033 Rail Maintenance Project	0 0	22
BLDG-TSLD-3 BLDG - Timescaled Logic Diagrams	0 0	2
BLDG-SPP-3 BLDG - Storing Period Performance	0 0	
BLDG-HAW-3 BLDG - Hesource Assignment window	0 0	
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(Reset Remaining Duration and Units to Original	↓ Link actual to date and actual this period units and costs	
Portfolio: All Projects Access Mode: Shared Data Date: 04-10-20	Baseline: Rail Maintenance Project - B1 User: Student03 DB: Train (Professional)	

The Activity must also be set to Physical Percent Complete.

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Statusing the Activity

The Activity should be statused the same way it normally would, by checking the Started box in the Status tab for activities that have started and the Finished box as those are completed. The Actual Start and Actual Finish Dates should be adjusted as well.

To update the Activity Percent Complete, status the individual Steps in the Steps tab for the Activity. If a Step is complete, check the box for Completed (E). Typing 100 in the Step % Complete column (F) will automatically check the Completed box.

Activ	rities													
Proj	ects Activities													
٧L	ayout: Classic WBS			Filter: All Activities										
Activi	ty ID 🗸	Steps Completed	Activity Name		Original Duration	Remaining Duration	Start	Finish	Activity % Complete	^	2 Jan	Feb	2020 Mar Apr May	Jun
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If a Step is started, but not completed, enter the percent complete in the Step % Complete column (F). The Activity Percent Complete (G) field will be automatically calculated based on the weighted percent complete of the Steps.





Viewing Steps in Visualizer

A standard tabular report within P6 display the steps and can be modified to include the Step Weight and % Complete fields, however, Visualize provides additional visibility to the fields in a Gantt view as shown below.

1-21-19			RAIL-2033 - Rail Maintenance Project	DRMcNatty
Activity ID	Start	Activity % Complete		
Activity Name	Finish	Step Name and Step % Complete	rti mi January February March April May June July August September	October
Rail Maintenance Pr	oj			000000
Surveys			· · · · · · · · · · · · · · · · · · ·	
SUR - 1000 Blue Line Survey	01-02-20 02-26-20	100.00% 400 - Main to Charleston 100.00% 404 - Charleston to Buena Vista 100.00% 408 - Buena Vista to Filmore 100.00% 412 - Filmore to North Amber 100.00%	SUR - 1900 Blue Line Survey	
SUR - 1010 Red Line Survey	01-30-20 03-25-20	100.00% 401 - Main to South Bend 100.00% 405 - South Bend to Peadmont 100.00% 409 - Peadmont to Franklin 100.00% 413 - Franklin 100.00%	SUR - 1010 Red Line Survey	
SUR - 1020 Yellow Line Survey	02-27-20 06-05-20	43.75% 402 - Oceanside to Weston 100.00% 406 - Weston to South Bend 100.00% 410 - South Bend to Titon 50.00% 414 - Titon to Riverbed 0.00% 419 - Riverbed to Andreer 0.00%	SUR - 1020 Yellow Line Survey	
SUR - 1030 Grey Line Survey	03-26-20 06-05-20	40.00% 403 - Riverside to Dalton 100.00% 407 - Dalton to Main 0.00% 411 - Main to Angel Cove 0.00%	SUR - 1 30 Grey Line Survey	
Rail Maintenance			· · · · · · · · · · · · · · · · · · ·	,
Actual Worl Remaining Progress Summary	k Work			
Progress Summary				

In this example, the Activity % Complete is provided on the first line of the Activity and the Steps are listed below it with each of their individual % Completes. The bar chart in the Gantt has been set to show the Activity % Complete as a progress bar within the Actual and Remaining bars.

Moving from a typical 90% Physical percent complete for months on end to utilizing Steps more accurately reflects the progress of the Activity and, therefore, the Project.

