

# TECH TIP

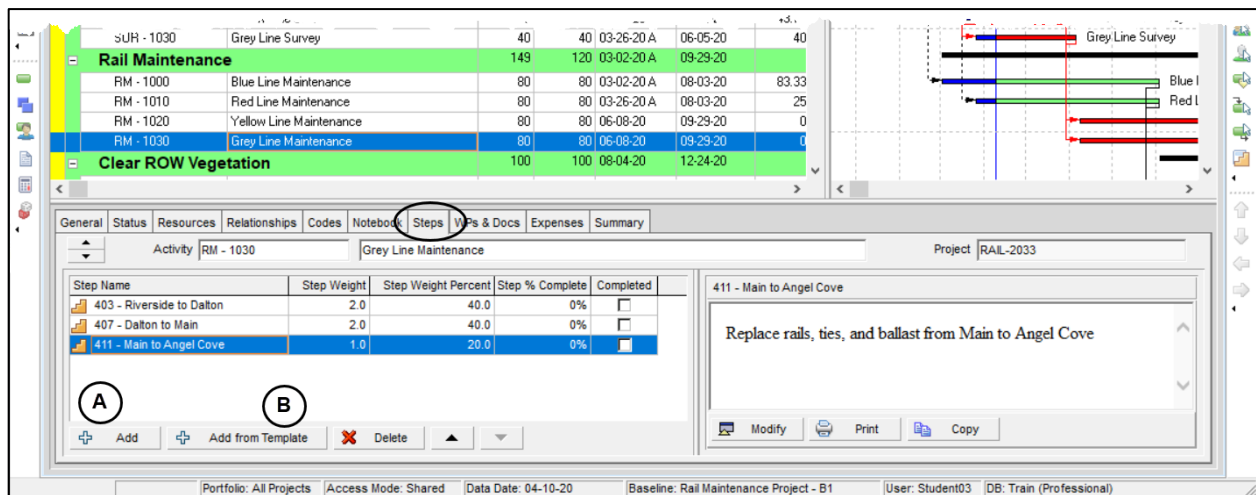
## USING STEPS TO CALCULATE % COMPLETE IN P6 ORACLE PRIMAVERA P6

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.

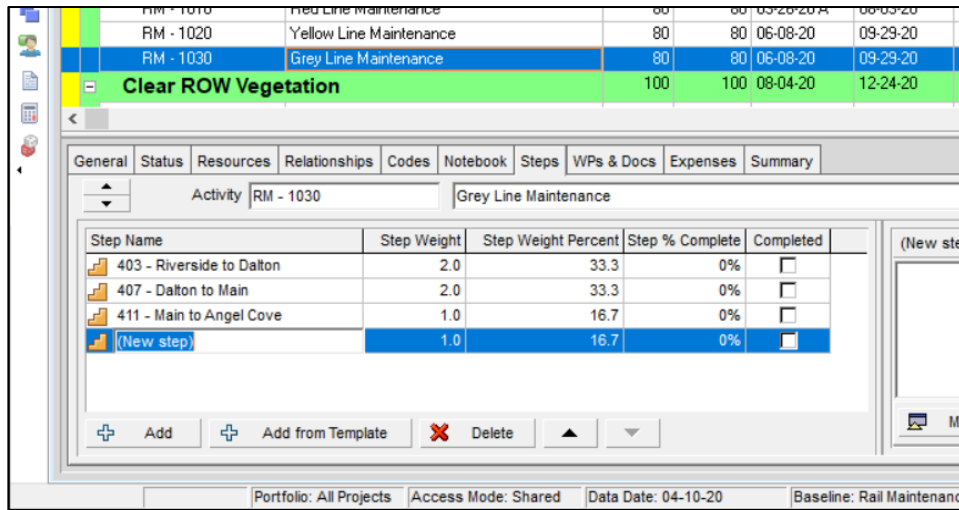
### Creating Project Steps

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.

## USING STEPS TO CALCULATE % COMPLETE IN P6



The screenshot shows the Primavera P6 interface. At the top, a summary table lists activities and their completion status:

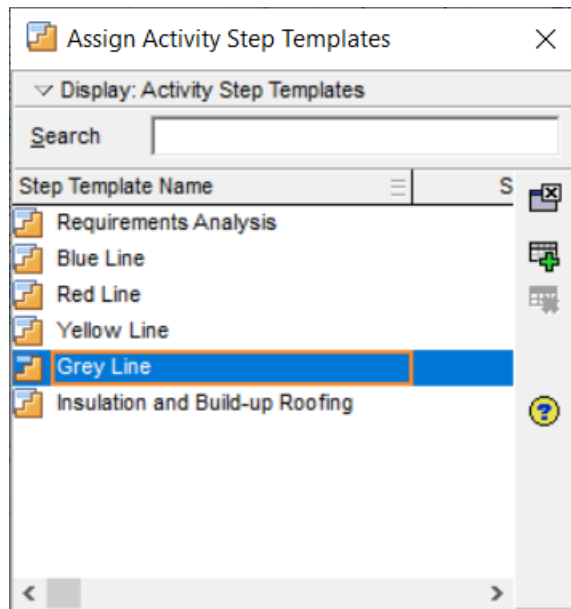
Activity	Weight	Weight Percent	Step % Complete	Completed
RM - 1020 Yellow Line Maintenance	80	80	06-08-20	09-29-20
RM - 1030 Grey Line Maintenance	80	80	06-08-20	09-29-20
<b>Clear ROW Vegetation</b>	<b>100</b>	<b>100</b>	<b>08-04-20</b>	<b>12-24-20</b>

Below this, the 'Steps' tab is selected for the activity 'RM - 1030 Grey Line Maintenance'. It shows a list of steps with their weights and completion percentages:

Step Name	Step Weight	Step Weight Percent	Step % Complete	Completed
403 - Riverside to Dalton	2.0	33.3	0%	<input type="checkbox"/>
407 - Dalton to Main	2.0	33.3	0%	<input type="checkbox"/>
411 - Main to Angel Cove	1.0	16.7	0%	<input type="checkbox"/>
(New step)	1.0	16.7	0%	<input type="checkbox"/>

At the bottom, the status bar indicates: Portfolio: All Projects, Access Mode: Shared, Data Date: 04-10-20, Baseline: Rail Maintenance.

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

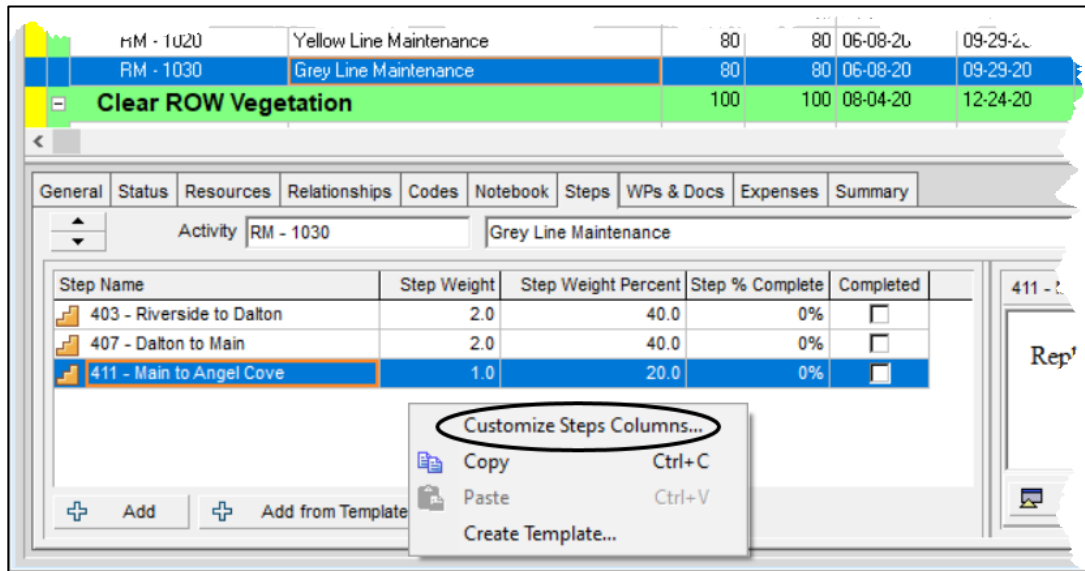


With the right permissions, Step Templates can be created in the Enterprise / Activity Step Templates window.

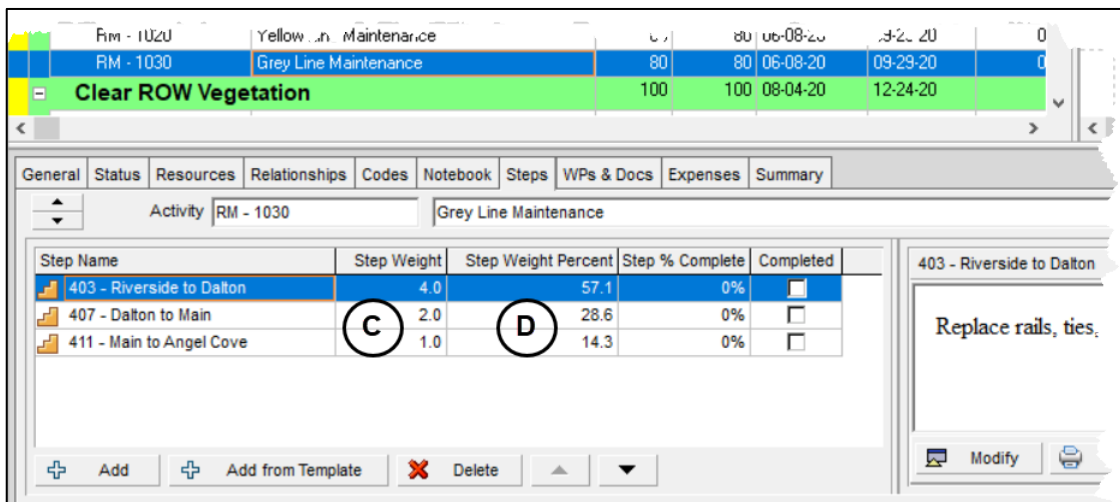
# USING STEPS TO CALCULATE % COMPLETE IN P6

## 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.



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.

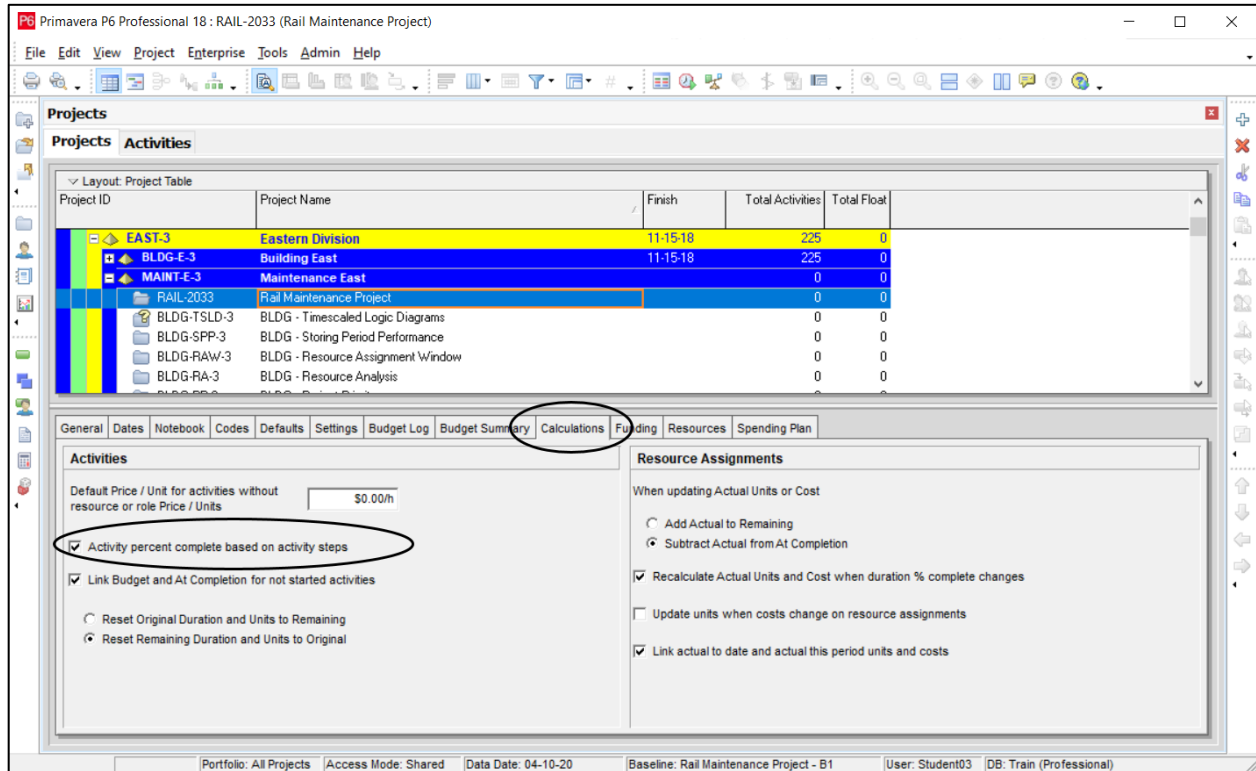


In the example above, the Step Weight (C) of Main to Angel Cove is the shortest amount of track and has the least amount of work to be performed. Dalton to Main is twice as big and Riverside to Dalton is four times bigger than Main to Angel Cove. The Step Weight Percent (D) is automatically calculated based on the general weight percent of the total of the Step Weight values.

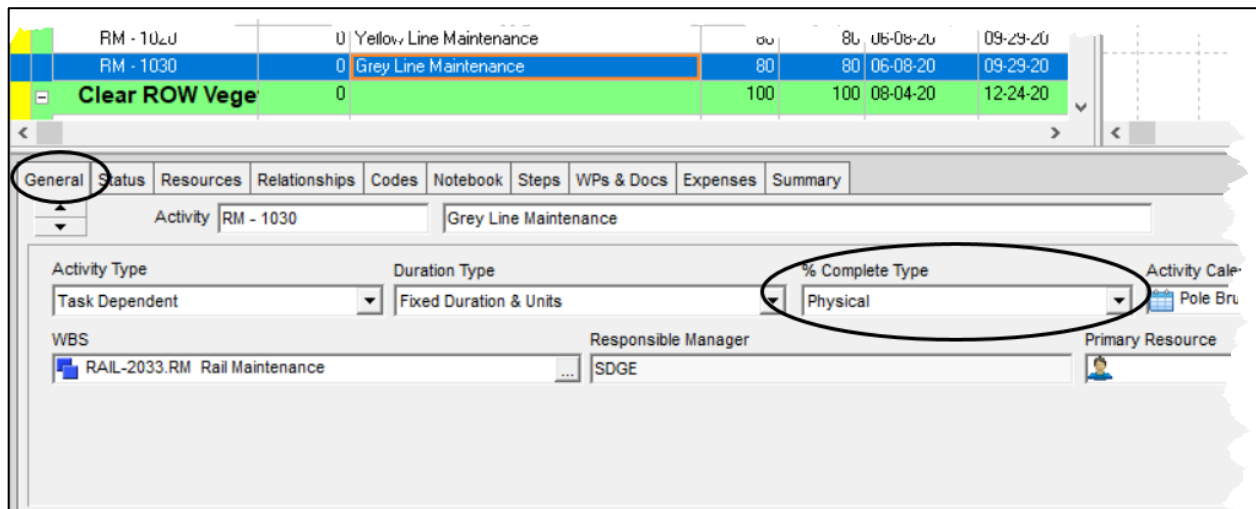
# USING STEPS TO CALCULATE % COMPLETE IN P6

## 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.



The Activity must also be set to Physical Percent Complete.



# USING STEPS TO CALCULATE % COMPLETE IN P6

## 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.

The screenshot displays the Primavera P6 Activities window. The top section shows a list of activities under the 'Activities' tab. The bottom section shows the 'Steps' tab for a selected activity, 'SUR - 1020'. The 'Steps' table includes columns for Step Name, Step Weight, Step Weight Percent, Step % Complete, and Completed. The 'Completed' column is circled with an 'E', and the 'Step % Complete' column is circled with an 'F'. The 'Activity % Complete' column in the main table is circled with a 'G'.

Activity ID	Steps Completed	Activity Name	Original Duration	Remaining Duration	Start	Finish	Activity % Complete
<b>Surveys</b>							
SUR - 1000	4	Blue Line Survey	40	0	01-02-20 A	02-26-20 A	100%
SUR - 1010	4	Red Line Survey	40	0	01-30-20 A	03-25-20 A	100%
SUR - 1020	2	Yellow Line Survey	40	40	02-27-20 A	06-05-20 A	43.75%
SUR - 1030	1	Grey Line Survey	40	40	03-26-20 A	06-05-20 A	40%
<b>Rail Maintenance</b>							
RM - 1000	3	Blue Line Maintenance	80	80	03-02-20 A	08-03-20 A	83.33%
RM - 1010	1	Red Line Maintenance	80	80	03-26-20 A	08-03-20 A	25%
RM - 1020	0	Yellow Line Maintenance	80	80	06-08-20 A	09-29-20 A	0%
RM - 1030	0	Grey Line Maintenance	80	80	06-08-20 A	09-29-20 A	0%
<b>Clear ROW Vegetation</b>							
CV - 1000	0	Blue Line Vegetation	60	60	08-04-20 A	10-27-20 A	0%

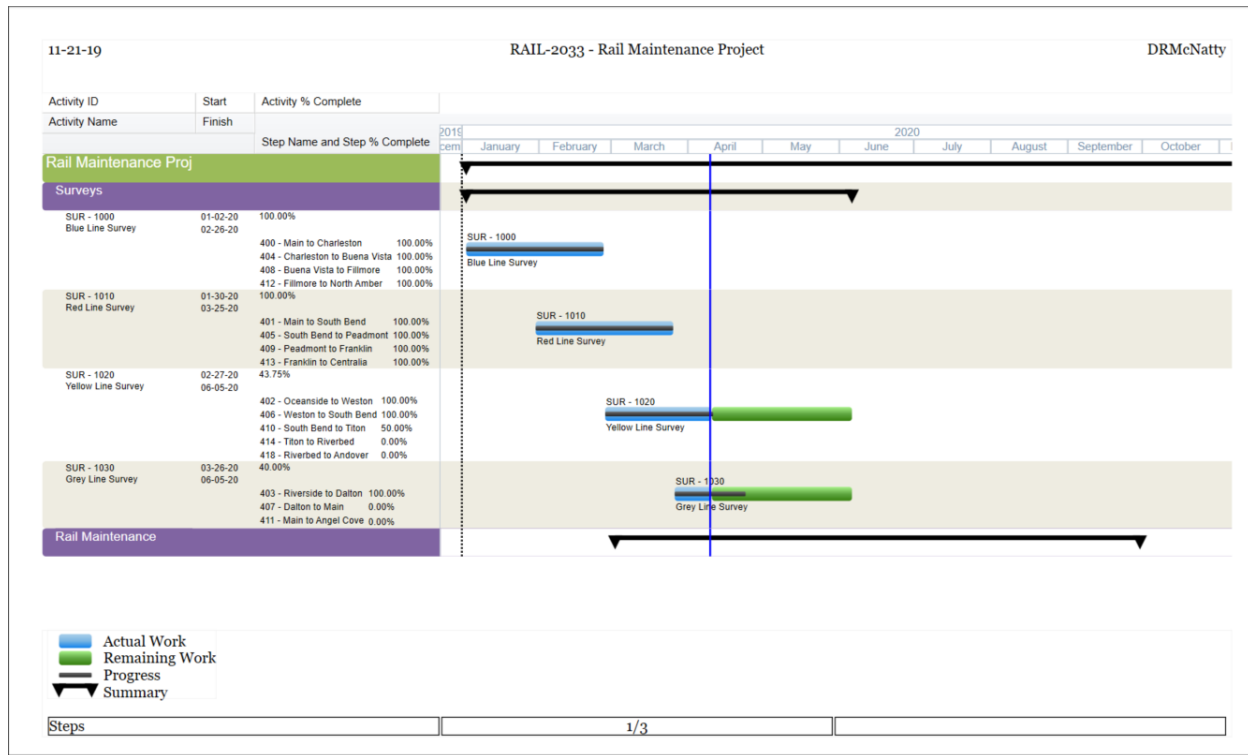
Step Name	Step Weight	Step Weight Percent	Step % Complete	Completed
402 - Oceanside to Weston	1.0	12.5	100%	<input checked="" type="checkbox"/>
406 - Weston to South Bend	2.0	25.0	100%	<input checked="" type="checkbox"/>
410 - South Bend to Titon	1.0	12.5	50%	<input type="checkbox"/>
414 - Titon to Riverbed	3.0	37.5	0%	<input type="checkbox"/>
418 - Riverbed to Andover	1.0	12.5	0%	<input type="checkbox"/>

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.

# USING STEPS TO CALCULATE % COMPLETE IN P6

## 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.



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.