How to generate S curve from Primavera-P6

The following steps should be done before S curve is generated.

1. Establish WBS
2. Adding activities, Activity codes, Activity sequencing
3. Define resource dictionary
4. Assign activity resource and budgeted quantity man hour
5. Save as a baseline schedule
6. Record the actual status when the actual works are done and schedule it based on report date

Plan data can be produced if the steps 1 to 5 are done.
The Actual data can also be exported if all the steps are done.

Suppose you have already done all these steps as we are learning how to generate S-curve-Histogram chart from P6.

There is more than one method to generate the time-based S-curve and histogram chart from P6.

This post demonstrates how these curves are produced by using Excel export data from Primavera-P6.

Use the following procedures:

- Open the Assignment window
- Bring out the columns that you want to export to excel
- Group/Organize the column data
- Set the Timescale format
- Export to Excel

A) Open the "Resource Assignment" window

You must be at resource assignment window when you are preparing to export S-curve data to excel. To view "Resource Assignment" window
B) Bring out the Columns that you want to export to excel
The first thing you need to find out yourself is which columns are required to be reported and how do you want to analyze the data after exported. Suppose you want to view Overall Budgeted Units and Actual Units that can be used to analyze overall progress.

And you might need to look at spreadsheet information such as Cum Budged Units and Cum Actual Units in order to analyze periodic data. That means cum Budgeted Units and Cum Actual Units from the Spreadsheet Fields are also displayed to calculate weekly or monthly progress S-curve and histogram data.

B-1) To View Overall Budgeted Units and Actual Units Columns

1. Go to View on the menu bar >> Columns >> Customize.

2. And then you will see the Columns window. In the selected options box, Activity ID, Activity Name, Resource ID Name, Start and Finish columns are shown by default.

3. Select Actual Units and Budgeted Units from units group in the available options box, then click the forward arrow diagram to show actual units and budgeted units as shown in figure below.
4. After Actual and Budgeted Units are selected, hide Start and Finish by clicking backward arrow if you don't want to see it. And Click OK Then resource assignments window can be viewed as shown in figure below.

B-2) To View Cum Budgeted Units and Actual Units Columns in Spreadsheet Fields

1. Click on the layout area and select Resource Usage Spreadsheet as shown in figure below.

2. Point the mouse to anywhere on the resource usage spreadsheet field area or click on Display button to view the desired columns. Go to Spreadsheet Fields >> Customize as shown in figure below.
3. Then you will see the spreadsheet field window showing Available Options and Selected options. Remaining Units (Remaining) is shown in selected options field by default. It is used when the remaining percent complete or remaining man hour data are analyzed. For now, select Remaining Units and hide it by clicking backward field.

Click the forward arrow button to select Cum Actual Units and Cum Budgeted Units as shown in figure below. In case you wish to view Early Curve and Late Curve, then select the Cum Remaining Early Units and Cum Remaining Late Units.

4. Finally, you will see the resource usage spreadsheet field showing cum "budgeted units and actual units" fields and data that can be exported to Excel Spreadsheet by copy and paste option.

5. Things that we should have done before export P6 data to excel are resource grouping and time scale format. Resource grouping represents what you want to report or analyze. Group the resource as total when you want to see overall summary data only. To view Group and Sort window, go to View >> Group and Sort by >>Customize. In Group and Sort window, mark on Show Grand Totals and Show Summaries Only to see overall summary data. See figure below.
6. Set the Timescale format; you may change the time scale format when you are preparing to export spreadsheet data. The exported P6 data would be displayed as weekly if the date interval is set to month/week. To see this changes, click the display button on the spreadsheet field area. Go to Timescale and you will see Timescale window >> set to Calendar in the date format type box and Month/Week in the date interval box.

7. Export the P6’s Spreadsheet Data to Excel; now, you are ready to export P6’s S curve/Histogram data to Excel spreadsheet. Select on the shading area and select all. And then copy and paste the data to excel. See figure below.

8. Suppose the exported data is as shown in figure below. As we set Cum Budgeted Units and Cum Actual Units in the spreadsheet option field, you will see Cum Budgeted Units and Cum Actual Units data through the project start to the end date.

Note: In order to get these data, activity resource, Budgeted Units and Actual Units must be assigned to each activity.
9. For instance; to analyze overall progress quickly, you can find at this sample Plan Value Quantity (Budgeted Units) is 3047 and Earn Value Quantity (Actual Units) as of 28 Nov 09 is 490. Therefore overall progress as of that data date is (490/3047=16%).

To create progress S-Curve and weekly progress histogram chart, populate the progress data. Then finally you will get the S-curve and histogram curve showing progress data and bar chart.