Importing an MS Project Pro XML file into P6 Pro

Overview of a bug in P6

Unfortunately, there is a bug in P6, that causes unexpected results when importing into P6 a MS Project XML file that *contains activities that have been assigned resources*—such as the carpenters, ironworkers, and laborers that are assigned to the activities of the Warehouse Project (Lab 6 Part 1).

Suppose that you have an MS Project file in which activities have been assigned with resources, such as carpenters, ironworkers, and laborers. If you try to save this MS Project file to an XML file and then try to import that XML file into P6, things will only "appear" to work correctly. P6 will import the XML file saved by MS Project without any errors.

Result of the P6 bug: P6 cannot level the imported resources for the resulting schedule

Because of this bug, resources that have been assigned to activities in MS Project (and then imported into P6) follow *a fixed schedule* in P6 (the schedule they followed in MS Project) which cannot be changed and does not match the activity schedule when the project is leveled in P6.

How to verify the P6 bug

To see this, suppose that the project in MS Project was set to start on November 1, 20xx. Suppose also, that you save this project as an XML in MS Project and then import the XML file into P6. Suppose next that you change the start date of the project in P6 to December 1, 20xx, and then reschedule the activities. What will happen is that all activities will be scheduled to occur in December (as they should), but their resources shown in the Resource Usage Spreadsheet (carpenters, ironworkers, laborers) will be scheduled to work in November. I.e., the resources follow the original schedule imported from the MS Project XML file, and do not match the new schedule of the activities in P6. This is clearly a bug in P6.

Also, if you try to level the resources in P6, you will see that nothing happens.

Workaround for Assigning Resources in P6 for Lab 6:

Follow these instructions to make entering the schedule for Lab 6 Part 1 into P6 easier.

In MS Project, open the following file that you can download from Canvas:

20xxF-Lab6-Warehouse-No_resources-On_Canvas.mpp

As the filename states, this MS Project file does not contain any resources.

In MS project, select "Save As..." and save this file as XML.

In P6, select "Import..." and import this file as MS Project XML (using the default choices in P6).

In P6, define the resources Carpenters, Ironworkers, and Laborers, as described in Lab 6.

In the Gantt Chart, use CTRL-left click to select all the activities whose names indicate that they use Carpenters. With these activities selected, right-click one of them and select "Assign" > "Resources". This will open up the "Assign Resources" dialog. In the upper left corner of the "Assign Resources" dialog,

select "Display" > "Filter by" > "All Resources" to view all resources. Select the "Carpenters" resource that you have defined earlier and click the "+" button to assign it to all selected activities.

Repeat the same steps in the above paragraph twice to assign the Ironworkers and Laborers to the appropriate activities.

Select one activity in the Gantt Chart table, right-click it, and select "Activity Details".

In the "Resources" tab of "Activity Details" you will see the names of the resources assigned to that activity. Change the field "Remaining Units Per Time" to match the number of resources that the activity needs each day. For easy reference, the number of resources that the activity needs each day is indicated in square brackets at the end of the activity name. Do this for all activities and al resources.

Additional Steps for Lab 6 in P6:

Add a leading 0 (zero) to the ID's of activities 1 through 9 to make them 01 through 09. Rename the ID of activity 31 to 12B.

At this point you will have the complete Warehouse Project in P6 and you can level it.

If you try to level this project using the P6 defaults, you will obtain a project duration of 38 days, which is longer than the solution produced by MS Project which results in a project duration of 29 days.

Follow these steps to obtain a duration of 29 days (which is the minimum possible without splitting activities).

Select "Tools" > "Level Resources" to open the "Level Resources" dialog.

Under the box "Leveling Priorities", change the "Field Name" from the default "Activity Leveling Priority" to "Total Float". (Remember that sorting activities by decreasing “Total Float” is the criterion used by Wiest’s algorithm to prioritize the activities for leveling.)

Clear the checkmark for "Preserve scheduled early and late dates". Now, each time P6 levels the project, it will start the leveling process from the previously-leveled schedule (and not from the original early-start schedule). As a result, P6 will give you a different project schedule with a different project duration each time you level the project.

Click on "Level". This will give you a schedule whose leveled project duration is different from 38 days but more than 29 days. Repeat leveling the project again and again until its leveled duration drops to 29 days. You have now found the best possible schedule.

The rest of the required steps are cosmetic and should be easy.