PLANNING AND CONTROL
USING
ORACLE® PRIMAVERA® P6
VERSIONS 8 to 21 PPM PROFESSIONAL

Planning and Progressing Project Schedules
With and Without Roles and Resources
in an
Established Database

BY

PAUL EASTWOOD HARRIS

sample book with two chapters

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INTRODUCTION

This publication is an upgrade of the *Project Planning & Control Using Primavera P6 Version 7* and has been written to enable new users to learn the planning and scheduling functions of Primavera Version 8, 15, 16, 17,18, 19, 20 21. Please note there are no versions 9 to 14 and Oracle changed their naming convention with the release of 15.1 so the name is the same as the year of the release. Due to the changes in the menus in this release, it is not possible to make the book backward compatible to earlier versions of the software.

Many users will have prior experience with Elecosoft (Asta) Powerproject or Microsoft Project and the author explains where there are differences in the products' functionality.

The author would appreciate any constructive comments on how this publication may be improved.

SUMMARY

The publication may be used as:

- A training manual for a three-day training course, or
- A self-teach book, or
- A reference manual

The screen shots for this publication are taken from Primavera Versions 8.1 or 8.2 or 8.3 or 8.4 or 15.1 or 15.2 or 16.1 or 16.2 or 17 or 18 or 19 or 20 or 21.

One-day, two-day, or three-day training courses may be run using this publication and it includes exercises for the students to complete at the end of each chapter. After the course, students may use this publication as a reference book. Instructors' PowerPoint presentations are available from Eastwood Harris web sites.

This publication is ideal for people who would like to quickly gain an understanding of how the software operates and explains how the software differs from Elecosoft Powerproject and Microsoft Project, thus making it ideal for people who wish to convert from these products.

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CUSTOMIZATION FOR TRAINING COURSES

Training organizations or companies that wish to conduct their own training may have this publication tailored to suit their requirements. This may be achieved removing, reordering or adding content to the publication and by writing their own exercises. Please contact the author to discuss this service.

AUTHOR'S COMMENT

As a project controls consultant, I have used a number of planning and scheduling software packages for the management of a range of project types and sizes. The first publications I published were user guides/training manuals for Primavera SureTrak, P3 and Microsoft Project users. These were well received by professional project managers and schedulers, so I decided to turn my attention to Primavera Enterprise, which is now called Primavera P6. This publication follows the same proven layout of my previous publications. I trust this publication will assist you in understanding how to use Primavera P6 on your projects.

APPRECIATION

I would like thank Michael Jack for his assistance in writing this book and Thomas Grant for his assistance in proof reading parts of the book.

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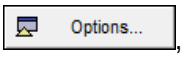
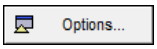
8 FORMATTING THE DISPLAY

This chapter shows you how to set up the on-screen presentation so that the schedule will be easier to read and more consistent. This chapter covers the following display and customizing topics:

Topic	Menu Command
• Formatting Columns	Open the **Column** form: • Select **View, Columns**, **Customize…**, or • Click on the icon.
• Formatting Activity Bars	Open the **Bar** form: • Select **View, Bars**,  , or • Click on the icon.
• Format Gridlines	**Bar Chart Gridlines** are formatted in the **View, Bar,**  form, **Gridlines** tab.
• Format Data Date	The **Data Date** is formatted in the **Bar Chart Options** form, **Data Date** tab.
• Formatting Row Height	Open the **Table, Font and Row** form by: • Selecting **View, Table Font and Row.**
• Formatting Colors	There are limited options for formatting colors: • **Text** colors are formatted in the **Color** form accessed from the **Table, Font and Row** form which is opened by selecting **View, Table Font and Row**, icon. • **Bar Colors** are covered in the **Formatting the Bars** paragraph of this chapter. • **Band** colors are selected as part of the formatting of the layout by selecting **View, Group and Sort by** or clicking on the icon.
• Formatting Fonts	There are limited options for formatting fonts: • **Text** fonts are formatted in the **Font** form accessed from the **Table, Font and Row** form which is opened by selecting **View, Table Font and Row**, icon. • **Notebook** entries may be formatted when edited.
• Format Timescale	• Click on the icon, or • Select **View, Timescale**, or • Right-click in the Bar Chart area and select **Timescale**.

The formatting is applied to the current **Layout** and this formatting may be automatically saved as part of the Layout when another Layout is selected; the system will prompt. Views are covered in the **Group, Sort and Layouts** chapter.

Beware of clicking the button in any form; this does not save your edits, but re-sets the form back to the Primavera defaults, destroying your hard work.

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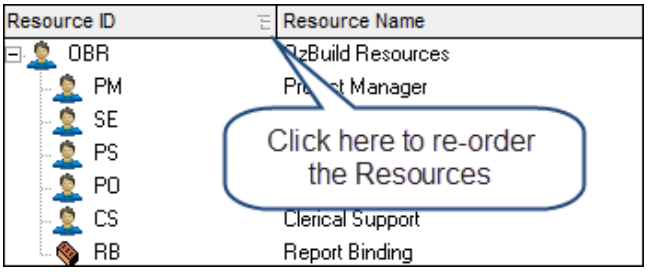
8.1 Formatting the Project Window

The formatting of the Project Window is very similar to the formatting of the **Activities Window** and will not be covered separately. Formatting, Filters and Layouts all work in the same way, except one is dealing with projects and not activities.

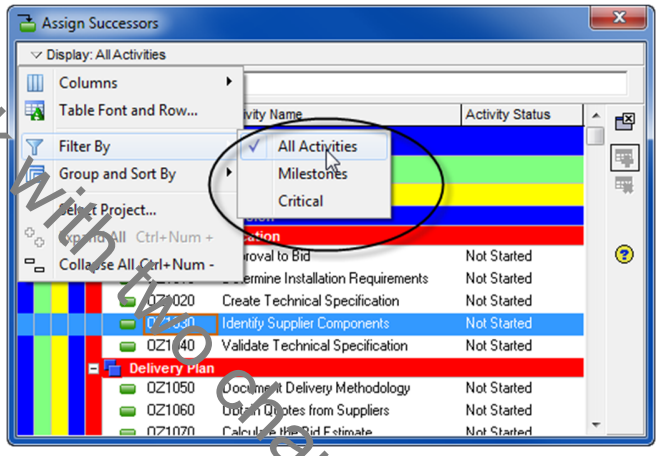
8.2 Understanding Forms

Unlike many software packages, Primavera has sorting and filtering functions in most forms and the principles are the same in most forms. This section will demonstrate some of the functions but you must be prepared to experiment with each form to see how they operate.

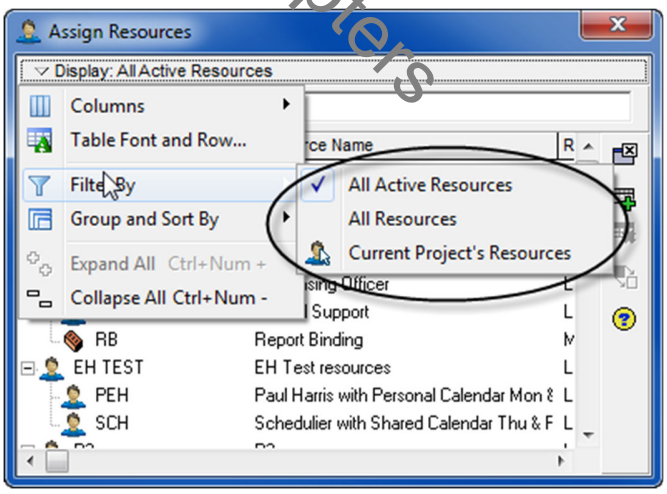
- Clicking in the **Resource ID** column of the **Resources Window** takes the formatting from hierarchical to alphabetical to reverse alphabetical and back to hierarchical. This function works in other forms with a hierarchical structure.



- The **Assign Successors** form has **Filter By** and **Group and Sort By** options that affect how data is grouped.



- The **Assign Resource** form has **Columns**, **Filter By**, and **Group and Sort By** options that affect what data is available.
- Ctl+F will also allow you to search for Resources matching a specific criterion.



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8.3 Formatting the Bars

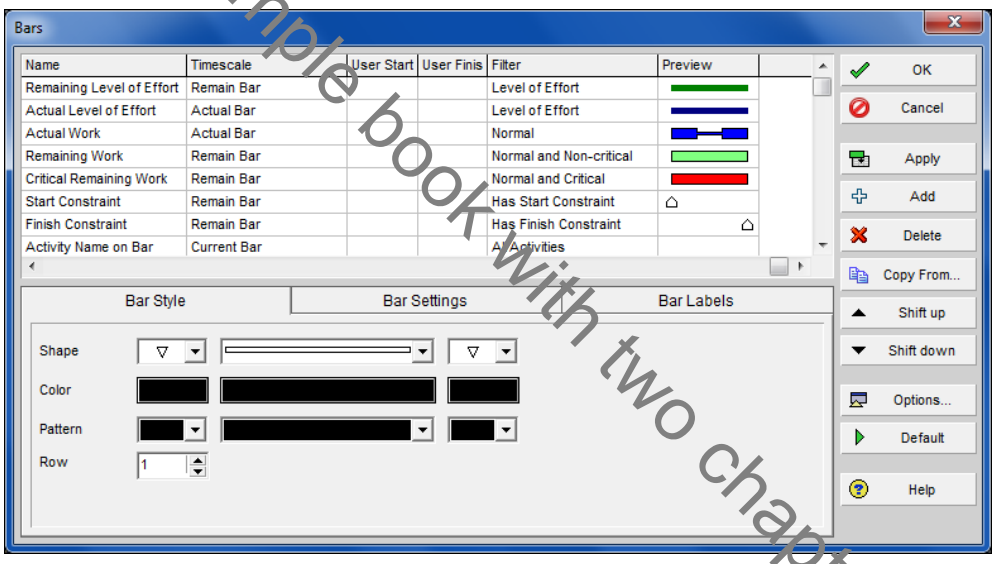
The bars in the Gantt Chart may be formatted to suit your requirements for display. Primavera does not have the option to format individual bars but is able to assign a filter to a bar style so that a style is applied to activities that meet a filter definition.

At the time of writing this book the author had placed a layout on **www.primavera.com.au** and **www.eh.com.au** under the **Technical Papers** page that has the bar formatting issues discussed below fixed. It is suggested that downloading this layout will save users a significant amount of formatting time.

8.3.1 Formatting Activity Bars

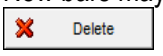
To format all the bars you must open the **Bar** form:

- Select **View, Bars**, or
- Click on the icon, or
- Right-click in the bars area and select **Bars** from the menu.

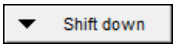


The following notes are the main points for using this function. Detailed information is available in the Help facility by searching for "Bar styles dialog box."

- Each bar listed in the table may be displayed on the bar chart by checking the box in the **Display** column.
- New bars may be added by clicking on the

icon and deleted by clicking on the 

icon.
- The bar at the top of the list is placed on the screen and the one below drawn over the top of it, so it would be simple to hide one bar with a second. The

and 

icons are used to move the bars up or down the list and therefore determine which bar is drawn on top of the next.
- The **Name** is the title assigned to the bar and may be displayed in the printout legend.
- The **Timescale** option is similar to the **Show For …**, **Tasks** option in the Microsoft Project **Bar Styles** form and enables the nomination of a predefined bar which is selected from the drop-down box.

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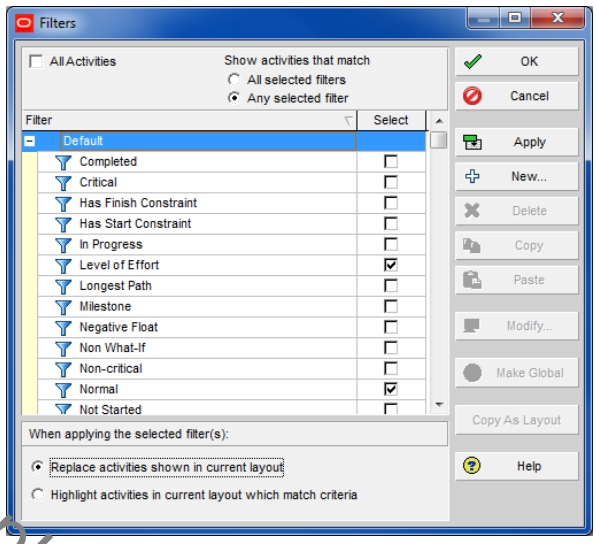
- Double-clicking on a cell in the **Filter** column opens the **Filters** form where you are able to select the filter/s which will determine which activities are displayed with the assigned bar format. Filters will be covered in detail in the **Filters** chapter.



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- **Negative Float** is displayed in a similar way as in Microsoft Project and requires another bar in addition to the **Positive Float** bar with both the **Timescale** and **Filter** selected as Negative Float.
- The **Float** bar shows **Total Float**; there is no **Free Float** bar available, as in Elecosoft (Asta) Powerproject and Microsoft Project.
- The **% Complete** bar is linked to the **Activity % Complete**.

8.3.2 Formatting Bars Issues

There are a number of issues with the Primavera standard bar formatting that need to be understood so the user may display the activity bars logically:

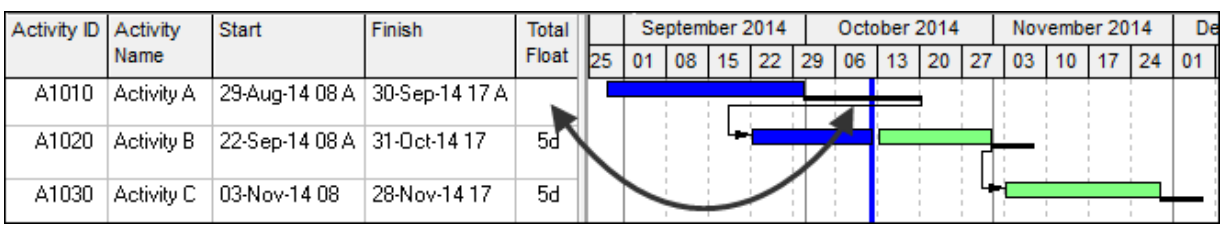
Actual, Remaining Critical and Remaining Critical Bars

It is recommended that you use the Primavera default bar display options displaying the **Actual Work** (this bar is displayed from the **Start** date to the **Data Date**), **Remaining Work** and **Critical Remaining Work** bars (these bars are displayed from the **Data Date** to the **Finish** date with the appropriate filter). This is because the **Early** bar will not display actual progress as in other software packages. Please read the **Understanding Dates** section in the **Tracking Progress** chapter to understand how the dates are calculated that are used to draw each bar.

Total Float Bar

The Total Float Bar is called the Float Bar in the Bars form which is inconsistent terminology.

By default a Total Float bar is displayed on a completed activity but the Float value is set to “Null” (which is displayed as a blank). It is not logical to display a float bar when there is no float value:



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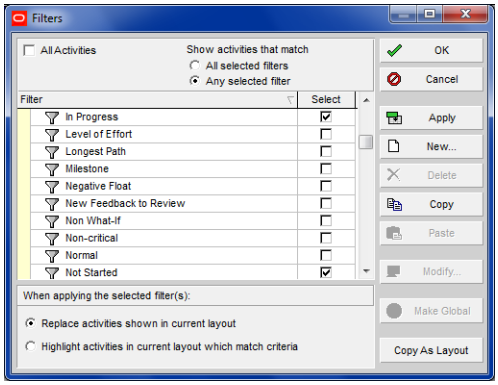
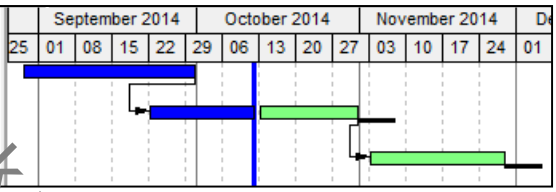
- To prevent this from happening you should edit the total **Float Bar Filter** in the **Bars** form so it is only displayed for Not Started or In Progress activities:

Display	Name	Timescale	User Start Date	User Finish Date	Filter	Preview
☑	Float Bar	Float Bar			Not Started or In Progress	



- This is what it should look like now:

Activity ID	Activity Name	Start	Finish	Total Float
A1010	Activity A	29-Aug-14 08 A	30-Sep-14 17 A	
A1020	Activity B	22-Sep-14 08 A	31-Oct-14 17	5d
A1030	Activity C	03-Nov-14 08	28-Nov-14 17	5d



Free Float Bar

This may not be easily displayed.

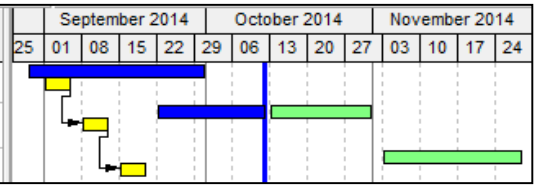
A Baseline Bar is Displayed when NO Project Baseline set

A Project Baseline Bar and Primary User Baseline Bar is displayed when a Baseline has not been assigned in the **Assign Baseline** form. The Planned Dates are displayed as the Baseline Bar. Therefore you must ensure you have a Baseline set before displaying a Baseline Bar. The Secondary and Tertiary Baselines bars are not displayed until a baseline has been assigned.

Relationships displayed on Baseline Bars

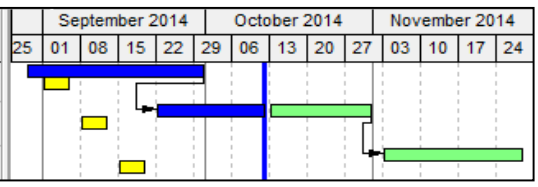
By default the relationships are displayed on the Baseline Bar, this is not the normal method:

Activity ID	Activity Name	Start	Finish	Total Float
A1010	Activity A	29-Aug-14 08 A	30-Sep-14 17 A	
A1020	Activity B	22-Sep-14 08 A	31-Oct-14 17	5d
A1030	Activity C	03-Nov-14 08	28-Nov-14 17	5d



To remove relationships from the Baseline Bar and put them on the current bars, move all the Baseline Bars and Baseline Milestones to the bottom of the Bars form:

Activity ID	Activity Name	Start	Finish	Total Float
A1010	Activity A	29-Aug-14 08 A	30-Sep-14 17 A	
A1020	Activity B	22-Sep-14 08 A	31-Oct-14 17	5d
A1030	Activity C	03-Nov-14 08	28-Nov-14 17	5d



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Remaining Level of Effort and Actual Level of Effort Bars

These are by default hidden and when these Activity Types are used then the activity bar will disappear. You should check both these bars so they are always displayed.

Baseline Bar Formatting

After you have moved all the baseline bars to the bottom:

- There is no **Project Baseline Milestone**; this will need to be added,
- The **Project Baseline** and **Primary Baseline** bars are both narrow yellow bars, the same as the Negative Float,
  - It is suggested you make them a different color and put them as thicker bars on the top and bottom of row 2,
  - Then change the **Baseline Milestone** colors to match,
  - Change the shape so one may be seen behind the other, and
  - Change the descriptions so they make sense,
- There are no **Secondary Baseline** or **Tertiary Baseline Milestones**. If you are not using these then delete the **Secondary Baseline** or **Tertiary Baseline** bars:

Display	Name	Timescale	User S	User F	Filter	Preview
☐	Project Baseline Bar	Project Baseline Bar			Normal	
☐	Project Baseline Milestone	Project Baseline Bar			Milestone	
☐	Primary Baseline	Primary Baseline Bar			Normal	
☐	Primary Baseline Milestone	Primary Baseline Bar			Milestone	

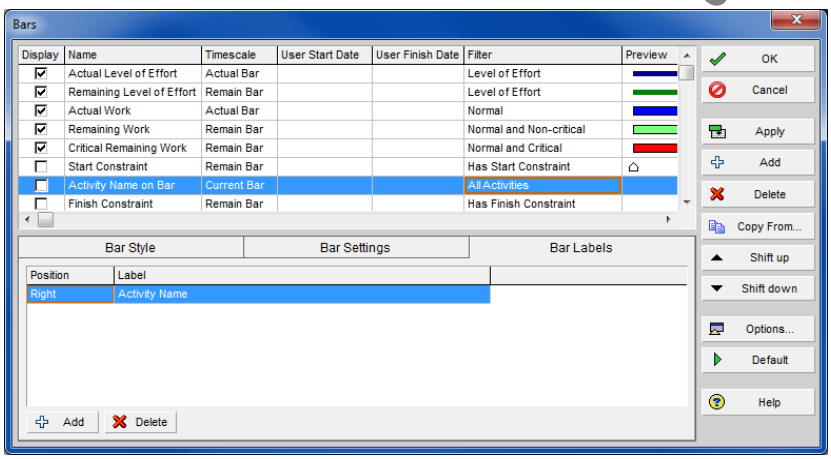
Text on Bars

There is text on many bars and it is difficult to add or remove text from bars with the current configuration.

It is suggested that text be removed from all bars, except from the **Current Bar Labels** bar by:

- Clicking on the **Bar Labels** tab at the bottom,
- Clicking on one bar at a time and using the Delete button at the bottom (NOT SIDE) of the screen to delete the text line,
- Changing the **Current Bar Labels** bar filter to read All Activities.

Now if you display the **Current Bar Labels** bar then text will be displayed on all bars and when this bar is hidden then all text will be removed from bars, thus making it simpler to add or remove bar text:



Sample book with two chapters

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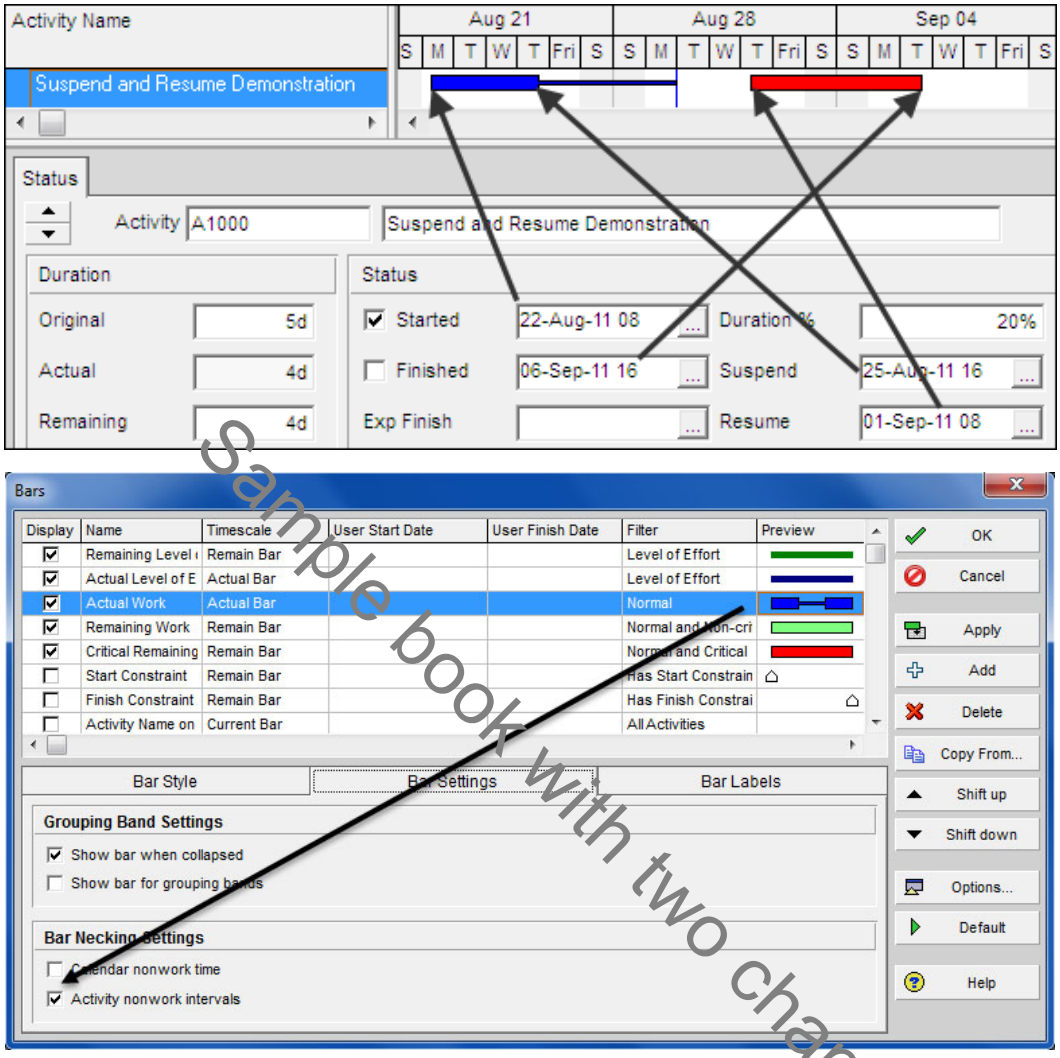
Suspend Date Display

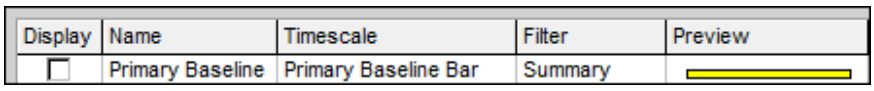
To ensure a **Suspend** date is displayed on the bar the Activity nonwork intervals should be checked:



Sample book with two chapters

Creating a Summary Baseline Bar

The default formatting also has no bar to display a Baseline Summary bar. To create a Summary Baseline bar you must add and format a bar as per the picture below:



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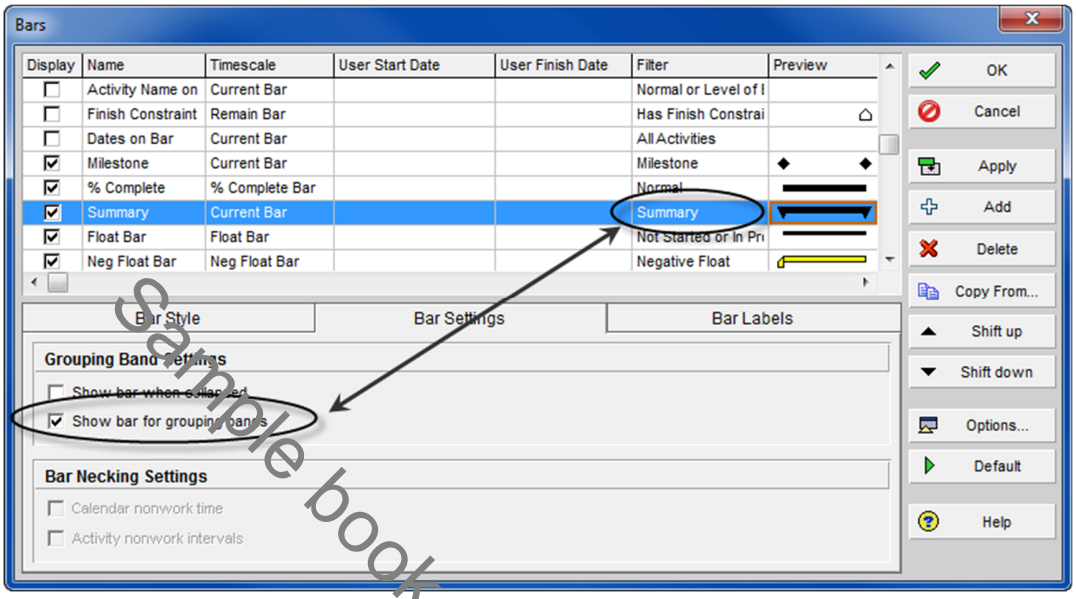
Creating a Summary Bar

It is not obvious how to create a Summary Bar:

- To create a new Summary Bar you will see that you may not select **Summary** from the filter drop-down box,
- You must check the **Bar Settings** tab, **Show bar for grouping bands** to create a Summary Bar:



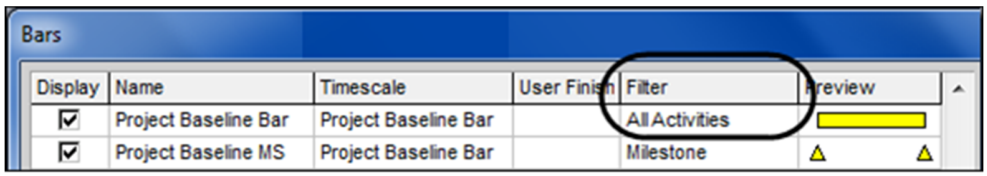
Sample book with two chapters

At the time of writing this book the author had placed a layout on **www.primavera.com.au** or **www.eh.com.au** under Technical Papers that has these bar formatting issues fixed. It is suggested that downloading this layout will save users a significant amount of formatting time.

The formatting of any existing layout may be set to the same as another layout, such as the **www.primavera.com.au_layout, by** using the **Copy From…** function.

Baseline Bar Disappearing when an Activity is made an LOE

Often after a Baseline has been set, it is required to add more detail to a baselined activity but retain a view of the original Baseline bar. This may be achieved by converting the original Activity to an LOE and adding the detailed activities below the LOE and linking the new activities to it. If the original Baseline activity disappears the you need to open the bars form and set the filter to **All Activities** and the Baseline bar will be displayed:



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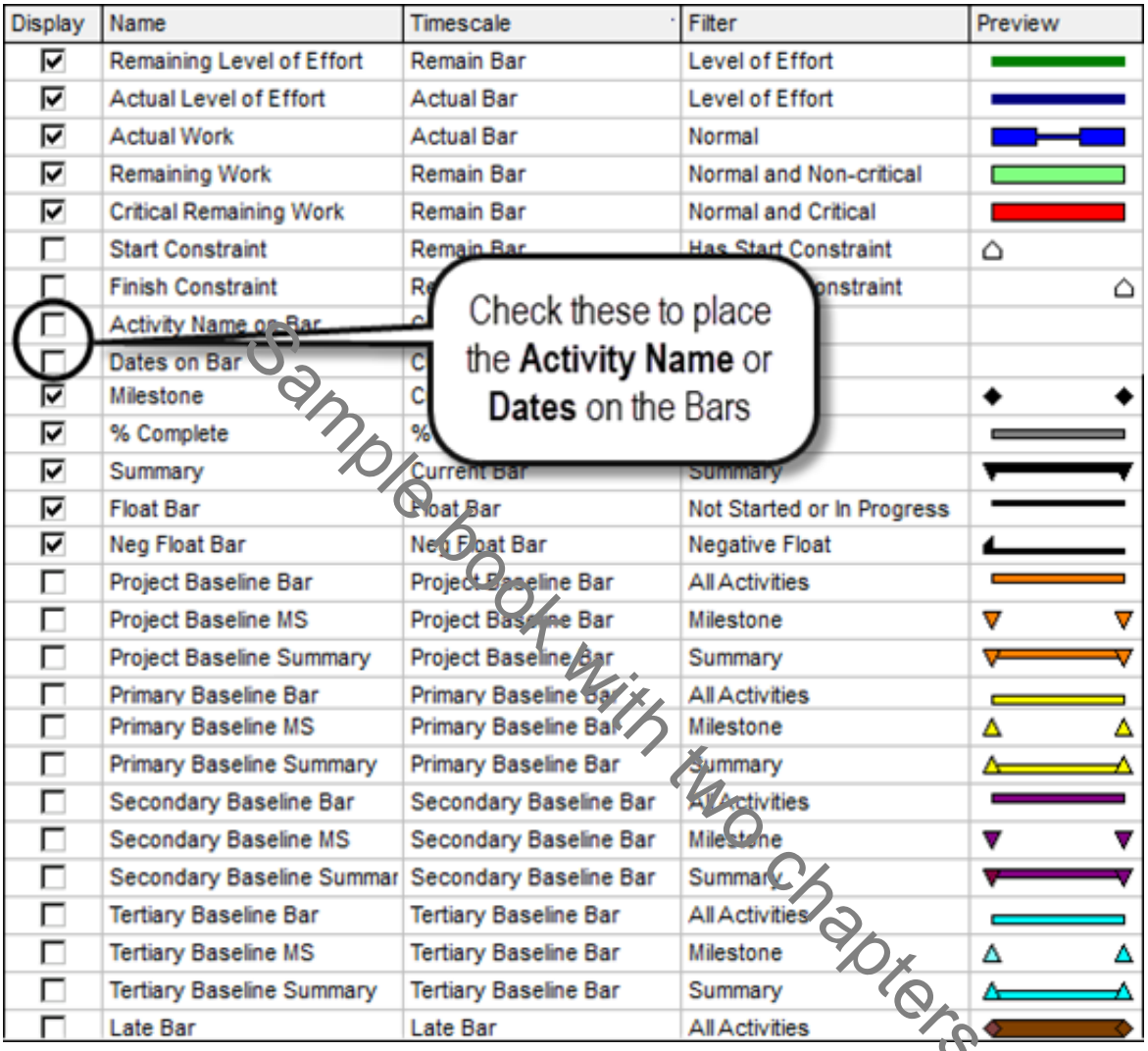
www.primavera.com.au_Layout

This layout may be downloaded from **www.primavera.com.au** or **www.eh.com.au** under **Software and Downloads** page, unzip it and place it on your desktop. Layouts created from later software versions may be identified from the file name. This has had the bars formatted as per the pictures below and resolves all the issues with the Primavera P6 defaults discussed above:



Sample book with two chapters

Administrators must check all their P6 Layouts to ensure the bars formatting is good and ensure all users are aware of the issues of using the **Bars** form **Default** button. One option is to just replace all the Oracle bar formatting with the formatting from the **www.primavera.com.au_Layout**.

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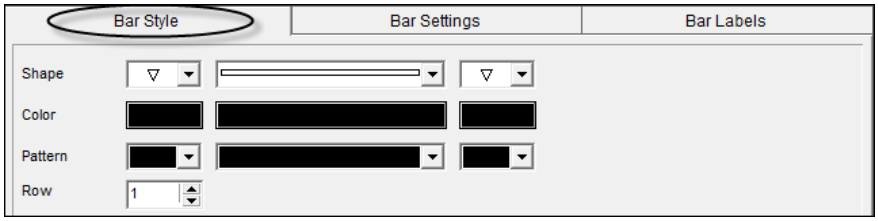
8.3.3 Bar Style Tab

The appearance of each bar is edited in the lower half of the form. The bar's start, middle, and end points may have their color, shape, pattern, etc., formatted.

The bars may be placed on one of three rows numbered from 1 to 3, from top to bottom, one bar above the other. If multiple bars are placed on the same row, the bar at the top of the list will be drawn first and the ones lower down the list will be drawn over the top.

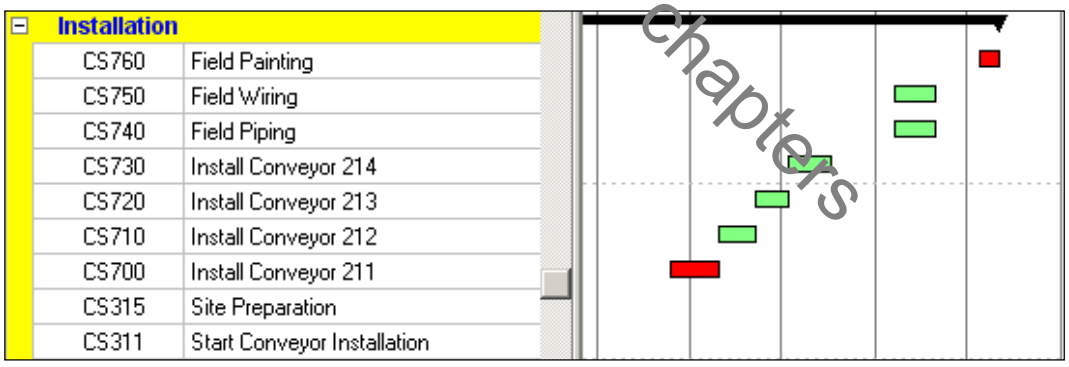


8.3.4 Bar Settings Tab

Sample book with two chapters

Show bar when collapsed

- **Show bar when collapsed** option displays the detailed bars on a single line when the WBS Node has been summarized; see the two pictures following:
  - Before summarizing:



  - After summarizing:

This is similar to the Microsoft Project **Always roll up Gantt bars** option in the **Layout** form.

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Show bar for grouping bands

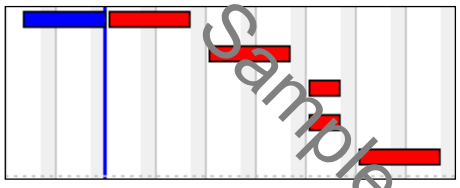
This shows a summarized bar all the time and converts the filter automatically to "Summary" bars only.

When formatting the **Bar Settings** for Milestones it is important to take note of the checked boxes and Filter format. If the box **Show bar for grouping bands** is checked, Milestones will appear at the ends of Summary Bars and not in line with the actual activities they belong to. The filter in this case will read **Summary** and not **Milestone**.

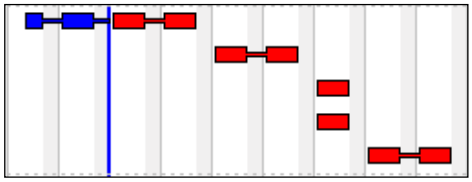
Bar Necking Settings

Bar Necking displays a thinner bar during times of inactivity such as weekends and holidays and applies only to the Current Bar setting column in the **Bars** form:

Un-necked bars



Necked bars



Sample book with two chapters

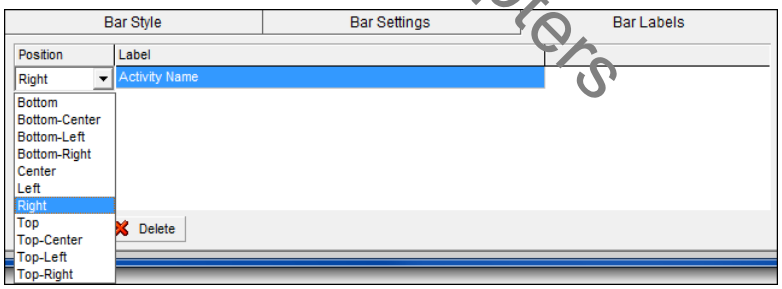
- **Calendar nonwork time** necks the bar based on the activity's calendar.
- **Activity nonwork intervals** necks the bar when Out of Sequence Progress options of Actual Dates or Retained Logic causes a break in the work. See the **Advanced Schedule Options** paragraph.

There is no Resource Bar available and Primavera will not neck on the resource calendar. When an activity is Resource Dependent and the resource is on a calendar different from the activity, then the bar may neck when the resource is working or not neck when the resource is not working.

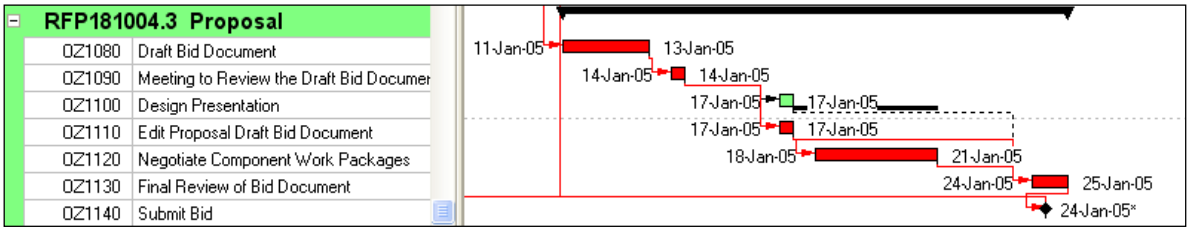
8.3.5 Bar Labels Tab

This tab enables the placement of text with a bar above, below, to the left, and to the right. The following pictures show how the start and finish dates are formatted and displayed on the bar chart:

- Select the bar that you wish to add the label to.
- Click on the Add and the Delete icons at the bottom of the **Bars** form to add and delete a **Label** item.



- Select the **Position** and **Label** from the drop-down boxes in the **Bar Labels** tab.



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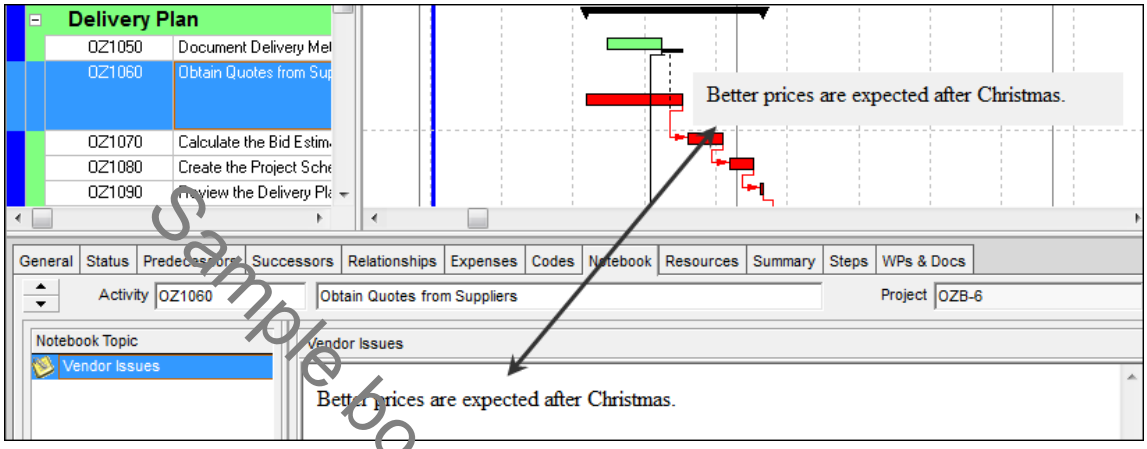
- The dates on the bar chart are adopted from the **User Preferences** and may not be formatted separately.

It is often useful to create a bar that only displays the text. This bar may be displayed or not displayed as required, which is much simpler than reformatting a bar to show text.

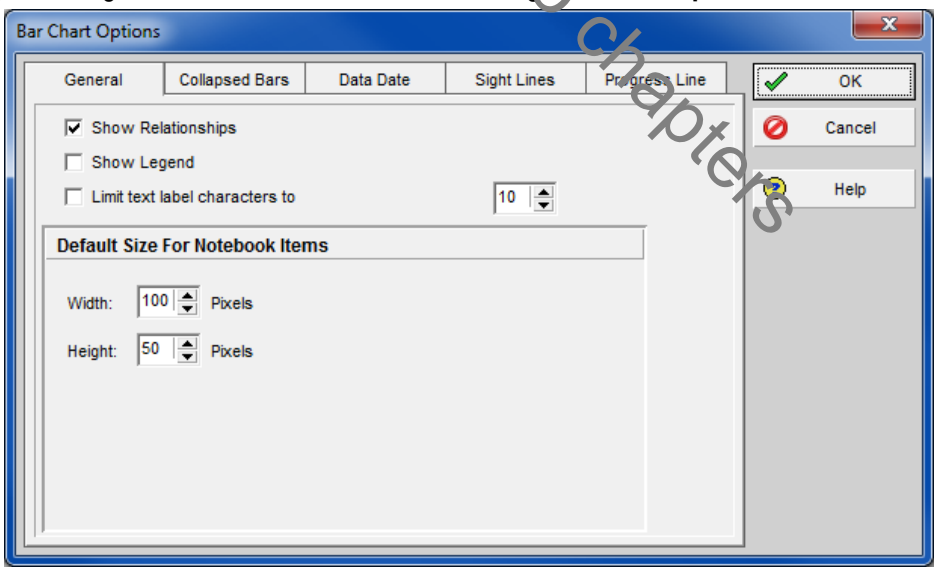
- Each **Notebook Topic** may be displayed on a bar one at a time by selecting the topic in the **Bar Labels** tab. After the box containing the label is displayed on the screen it may be adjusted in size by dragging.



Sample book with two chapters

8.3.6 Bar Chart Options Form

- The **Bar Chart Options** form is displayed by:
  - Clicking on the Options... icon from the **Bars** form, or
  - By selecting **View, Bar,** Options..., or
  - Right-clicking in the Gantt Chart area and selecting **Bar Chart Options…**:



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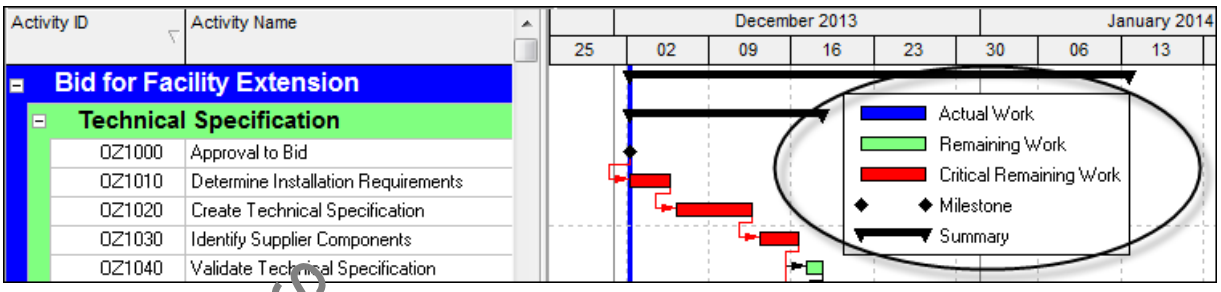
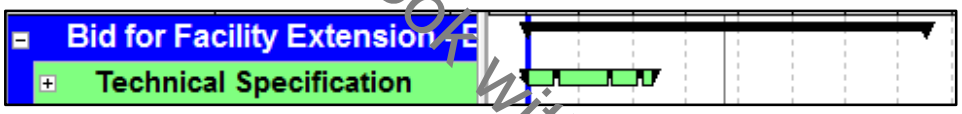
- The **General** tab has a variety of options for formatting the bar chart which are mainly self-explanatory.
  - **Show Relationships** has the same result as clicking on the icon and displays the relationships.
  - **Show Legend** displays a legend on the bar chart in the Activities View; see the following picture:

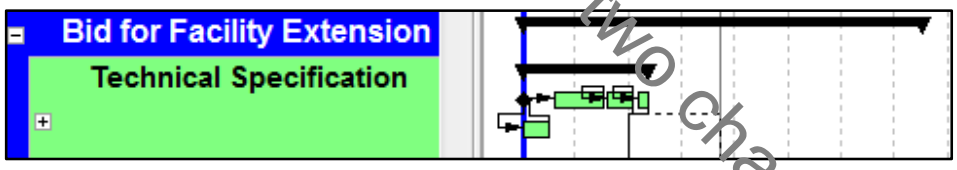


Sample book with two chapters

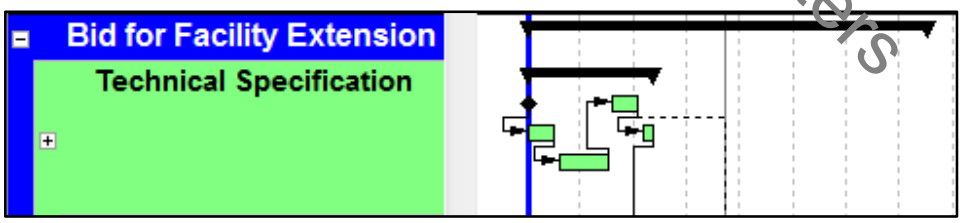
- The default size of the box displaying a **Notebook** topic may be set in the **Bar Chart Options** form, **General** tab, which is displayed by clicking on the Options... icon from the **Bars** form.
- The **Collapsed Bar** tab formats the bars when a WBS band has been collapsed and displays a summarized bar.
  - **Collapse to grouping bars**:



  - **Collapse individual bars to minimize space**:



  - **Collapse individual bars to minimize space** and **Allow overlapping of bar labels**:



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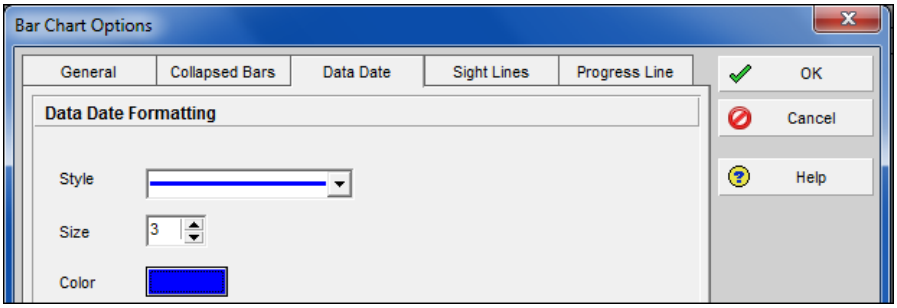
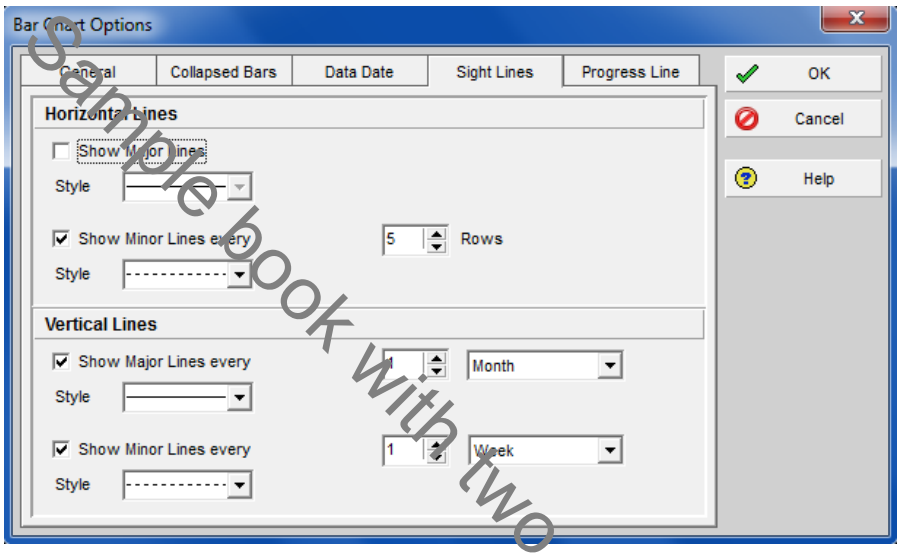
- The **Data Date** tab formats the Data Date, its style, color and size:



- Primavera Version 5.0 introduced the **Sight Lines** tab which enables the specification of both Major and Minor vertical and horizontal Sight Lines, which brings this functionality up to match Microsoft Project, but nowhere near the graphical functionality of Elecosoft (Asta) Powerproject.



Sample book with two chapters

- Primavera P6 Version 7 introduced the **Progress Line** Display on the Gantt Chart which is covered in detail in the next paragraph.

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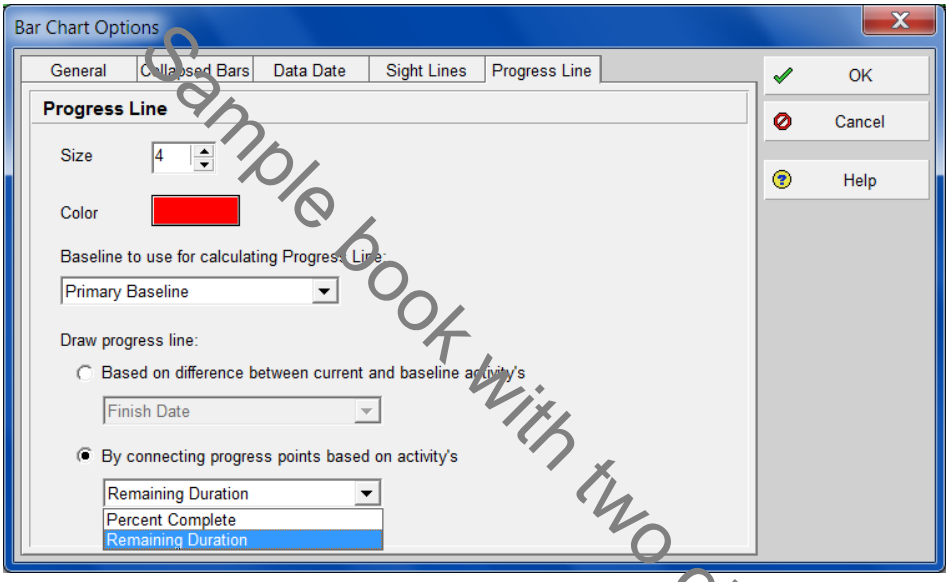
8.4 Progress Line Display on the Gantt Chart

A progress line displays how far ahead or behind activities are in relation to the Baseline. Either the Project Baseline or the Primary User Baseline may be used and there are four options:

- Difference between the Baseline Start Date and Activity Start Date,
- Difference between the Baseline Finish Date and Activity Finish Date,
- Connecting the progress points based on the Activity % Complete,
- Connecting the progress points based on the Activity Remaining Duration.

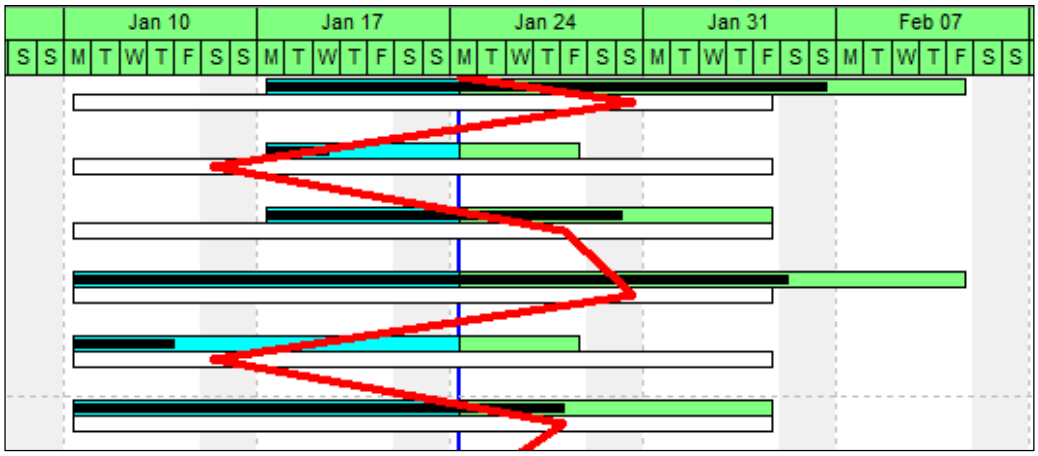
There are several main components of displaying a Progress Line in P6:

- First the progress line is formatted using the **View, Bar,** Options..., form, **Progress Line** tab, which may also be opened by right-clicking in the Gantt Chart area:



Sample book with two chapters

- Selecting **View, Progress Line** to hide or display the **Progress Line**.
- If you use either of the options of Percent Complete or Remaining Duration then you must display the appropriate Baseline Bar that has been selected as the **Baseline to use for calculating Progress Line:**
- The picture below shows the option highlighted above of **Percent Complete**:



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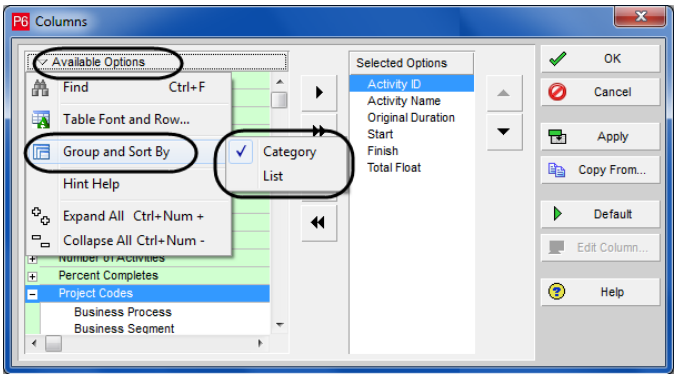
8.5 Formatting Columns

8.5.1 Selecting the Columns to be Displayed

The columns are formatted through the **Columns** form which may be opened by:



- Select **View, Columns**, **Customize**, or
- Click on the icon, **Customize**, or
- Right-click in the Columns to open a menu and select **Columns**:

The columns may be sorted by **List** of **Category** and they may be added or deleted either by:

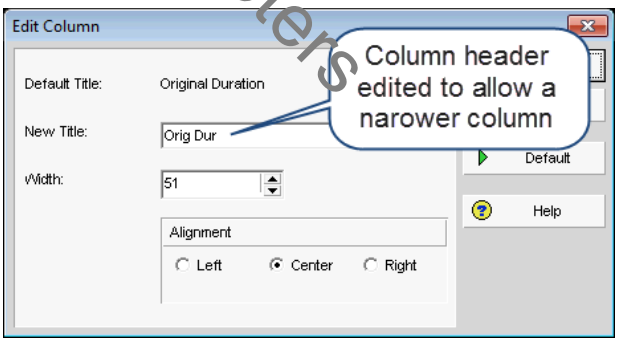
- Using the black arrows or
- By dragging the description left of right and up or down.
- When a Baseline is set then many more Baseline schedule column fields become available.

The **Column** form may be resized by dragging the edges.

- The available columns are displayed in the left window and may be listed under **Categories** or as a single **List**.
- To select how the column titles are displayed, click the **Available Options** drop-down box and then select **Group and Sort By** to choose either **List** or **Categories**, as per the picture above.
- The columns to be displayed are listed in the right **Selected Options Window** and are copied from **Available Options** to and from **Selected Options** using:
  - The icons , or
  - Dragging, or
  - Double-clicking.
- The Default icon sets the columns back to the Primavera default column display.

Sample book with two chapters

8.5.2 Column Header Alignment



- Select **View, Columns**, **Customize**, or
- Click on the icon, **Customize**, then
- Select the Edit Column... option which opens the **Edit Column** form and enables a user definable column title to be created in the **New Title:** cell and the **Column Title Alignment** to be set to Left, Center, or Right.

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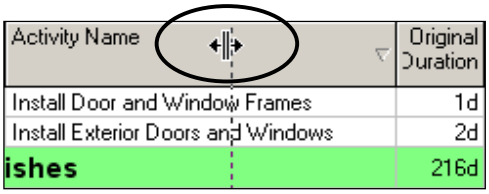
8.5.3 Adjusting the Width of Columns

You may adjust the width of the column in two ways:

- By dragging the column title separator: move the mouse pointer to the nearest vertical line of the column. A ⇹ mouse pointer will then appear and enable the column to be adjusted by click, hold and dragging.



- From the **Column** form select Edit Column... to open the **Edit Column** form and enter the width of the column in pixels.

8.5.4 Setting the Order of the Columns from Left to Right on the Screen

The order of the columns on the screen, from left to right, is the same as the order in the **Columns** form **Selected Options Window** from top to bottom. The order of the columns may be altered:

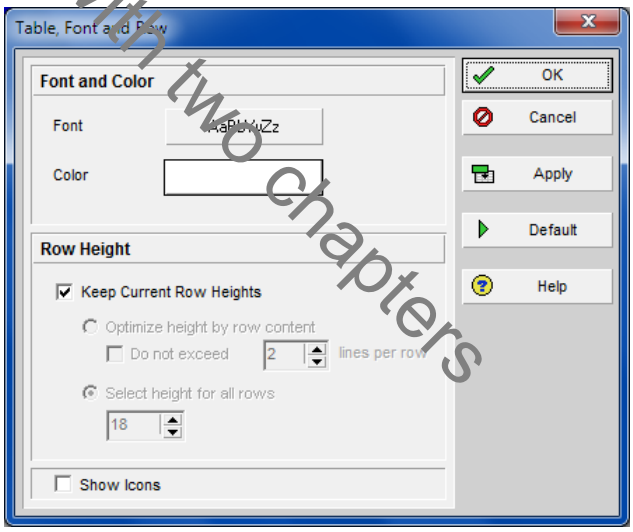
- Highlight the column in the **Columns** form **Selected Options Window** and use the ▲ and ▼ icons, or
- Click and hold the column title in a window and drag the column.

Sample book with two chapters

8.6 Row Height and Show Icon

Row heights may be adjusted to display text that would otherwise be truncated by a narrow column.

- The height of all rows may be formatted by selecting **View, Table Font and Row** to open the **Table, Font and Row** form. The options in this form are self-explanatory.
- The **Show Icons** option will display a different icon in front of the Activity and WBS.
  - ➢ In the **Projects Window** indicates a **What-if** project, a **Unopened** project, and an **Opened** project.
  - ➢ In the **Activities Window** indicates a WBS Node, a blue a complete activity, a blue and green an in-progress activity, and a green an un-started activity.



- The height of a single row may be manually adjusted in a similar way to adjusting row heights in Excel. Click the row; the pointer will change to a double-headed arrow ⇳; then drag the row with the mouse. These manually adjusted rows are not saved with a Layout.

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8.7 Format Timescale

8.7.1 Moving and Rescaling the Timescale

To display hidden parts of the schedule the timescale may be grabbed and moved by placing the cursor in the top half of the Timescale. The cursor will turn into a ; left-click and drag left or right.

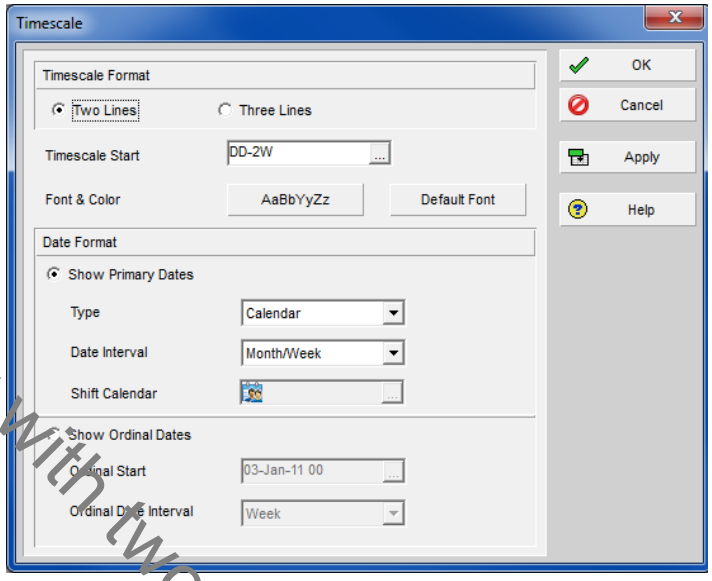
The timescale may be rescaled, therefore increasing or decreasing the length of the bars and displaying more or less of the schedule, by placing the cursor in the bottom half of the Timescale. The cursor will turn into a ; click, hold and drag left to make the bars shorter and right to make the bars longer.

When there are no bars in view when you are viewing a time ahead or behind the activity dates, you may double-click in the **Gantt Chart** area to bring them back into view.

8.7.2 Format Timescale Command

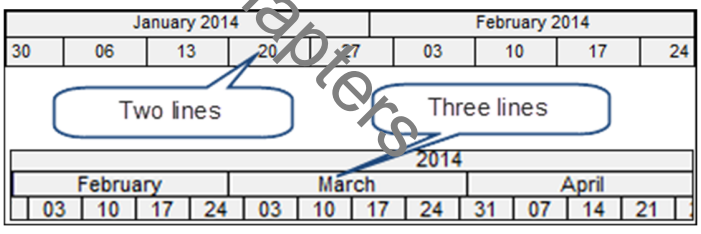
The **Timescale** form provides a number of options for the display of the timescale, which is located above the Bar Chart. To open the **Timescale** form:

- Click on the icon, or
- Select **View, Timescale**, or
- Right-click in the Bar Chart area and select **Timescale**.



The options available in the **Timescale** form are:

- **Timescale Format** has the options of:
  - Two lines, or
  - Three lines



- **Font and Color**
  - The AaBbYyZz icon opens the **Edit**, **Font and Color** form which enables the timescale and column headers font and color to be changed.
  - By clicking on the Default Font icon all changes will be reversed.

Sample book with two chapters

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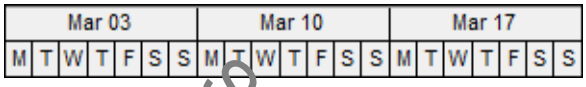
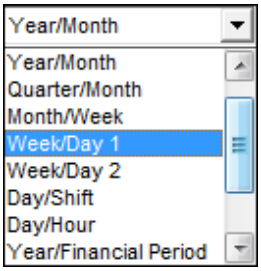
Date Format

- **Type**
  - **Calendar** displays a normal calendar.
  - **Fiscal Year** displays the fiscal year in the year line. The Fiscal Year Start Month is set in the **Settings** tab of the **Project Details** form in the **Projects Window**.
  - **Week of the Year** displays the week of the year starting from "1" for the first week in January and is often termed **Manufacturing Week**.

- **Date Interval** sets the timescale and has the options in the picture to the right:
  - The **Week/Day 1** displays the days like this:



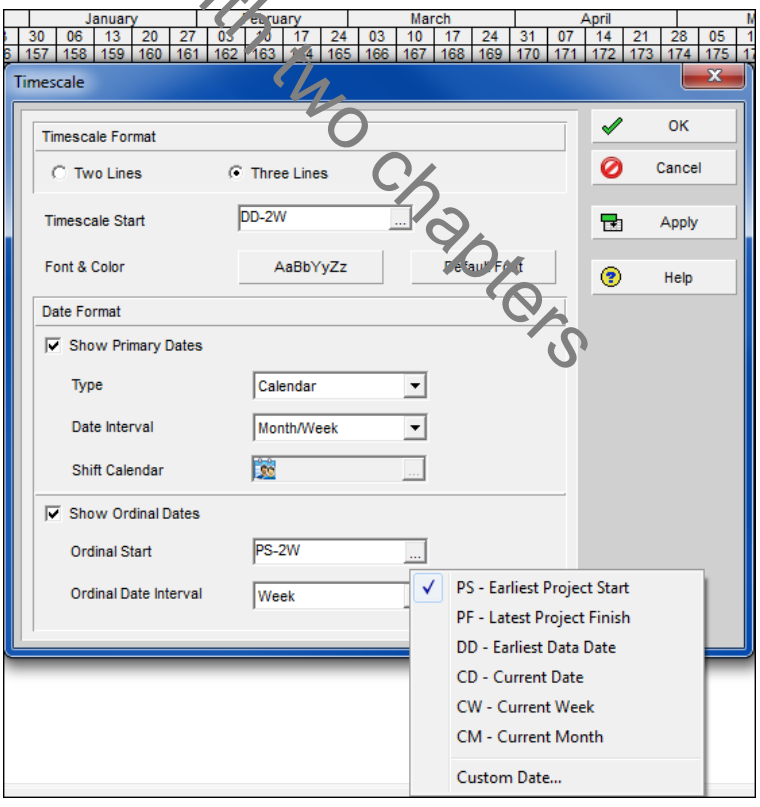
  - The **Week/Day 2** displays the days like this:



  - The **Date Interval** may also be adjusted by clicking on the or the , which moves the timescale setting up and down the list shown above.

- **Shift Calendar** breaks the day into time intervals to suit the shift intervals when the **Day/Shift** option has been selected.

- **Show Ordinal Dates** displays the timescale to be counted by the unit selected in the **Date Interval**. This is useful for displaying a schedule when the start of the project is unknown. Ordinal dates display the timescale by counting in the selected units starting from a user definable start date. When 3 lines are displayed the ordinal dates and calendar dates may be displayed:



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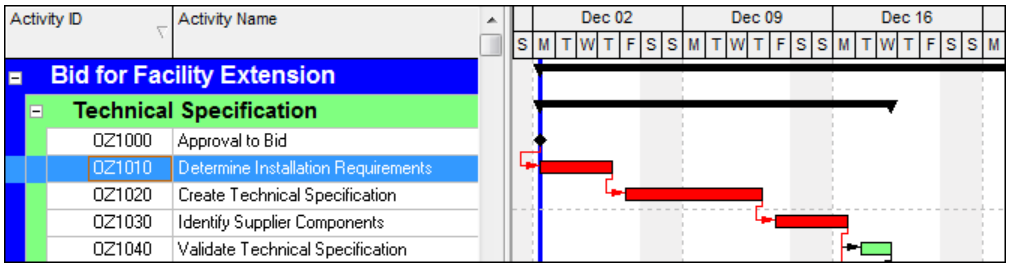
8.7.3 Nonwork Period Shading in Timescale

The nonwork period shading behind the bars is set by the database **Default Calendar** and is selected by:

- In the Professional Version selecting **Enterprise**, **Calendars**…and checking a calendar in the **Default Column**, and
- In the Optional Client this is set through the Web under **Administer**, **Enterprise Data**.



8.8 *Inserting Attachments – Text Boxes and Curtain*

sample book with two chapters

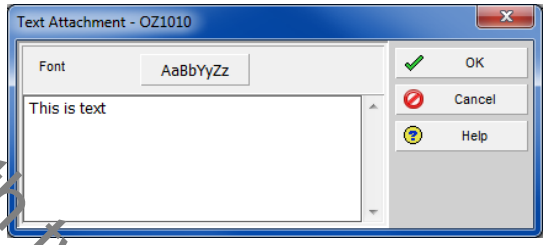
8.8.1 Adding and Deleting a Text Box

A text box may be inserted in a bar chart area:

- Select the Activity which the new Text Box is to be associated with, either
- Right-click in the Bar Chart to open the menu, select **Attachments**, **Text**,

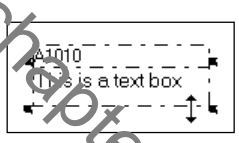
Or:

- Select **View, Attachments**, **Text**, and
- The **Text Attachment** form will be displayed.



Then:

- Type in the text and format the font by clicking on the AaBbYyZz icon.
- A **Text Box** may be repositioned by clicking on the text and using the cursor to drag the corners and sides.



To delete a Text box, position the cursor over the text box until it transforms into a + then click and you may now hit the **Delete** key.

The author found in his load of P6 Version 8.2 that it was not possible to delete a Text Box, only the text inside a Text Box to make the comment disappear. This was fixed in Version 8.3.

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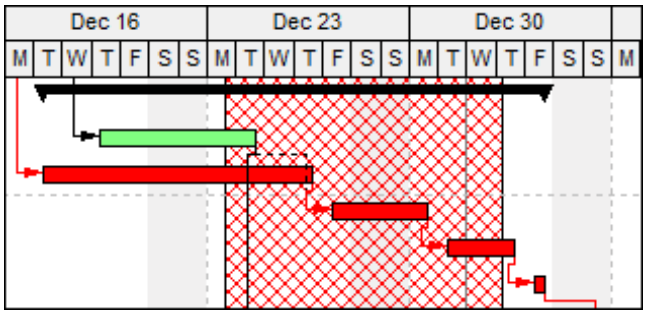
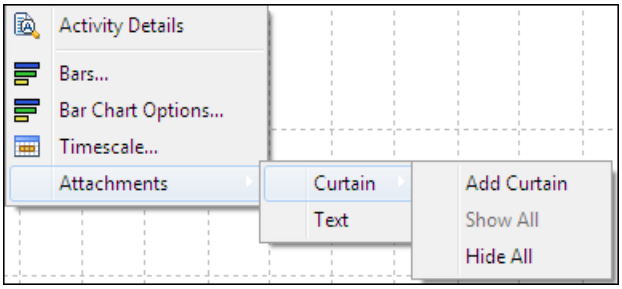
8.8.2 Adding and Deleting a Curtain

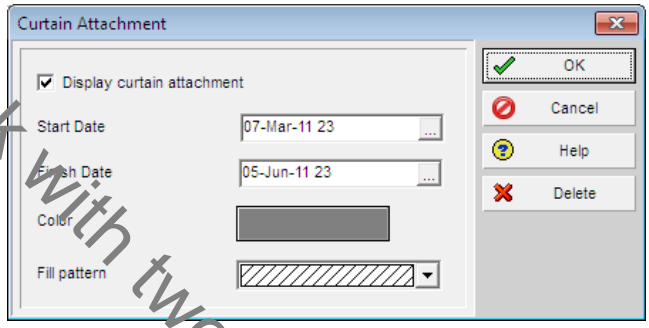


Primavera Version 5.0 introduced a function allowing the placing of multiple curtains on the Gantt Chart which may be all hidden or displayed. A **Curtain**, used to highlight periods of time over part of the bar chart.

Select **View, Attachments** to display the **Curtain** menu or right-click a bar and select **Attachments, Curtain**:



- **Add Curtain** opens the **Curtain Attachment** form used to create a curtain,
- **Show All** shows all the curtains,
- **Hide All** hides all the curtains, and
- Double Clicking on a curtain in the Gantt Chart also opens the **Curtain Attachment** form where individual curtains may be deleted or hidden.



- Using the **Start Date** and **Finish Date** boxes, or
- Grabbing the left or right edge of the Curtain in the Bar Chart (the cursor will change to a) and dragging the start or finish date, or
- Grabbing the Curtain in the center (the cursor will change to a) and dragging the whole Curtain.

A curtain is deleted by double clicking on the curtain to open the **Curtain Attachment** form and clicking on the

button.

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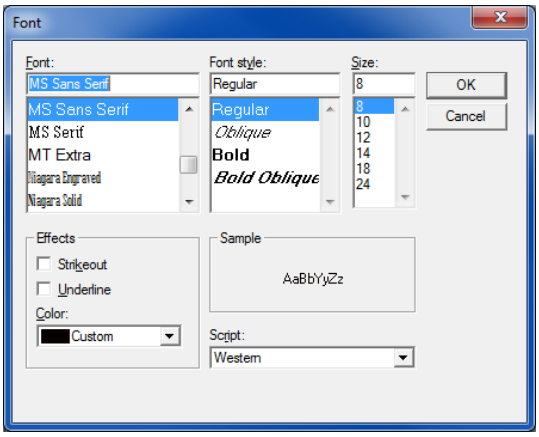
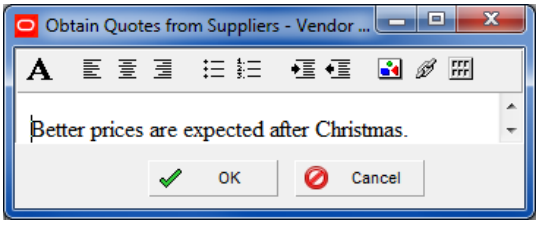
8.9 Format Fonts and Font Colors

The format font options are:



- The **Activity Data** fonts are formatted in the **Table, Font and Row** form (displayed in the paragraph above) by selecting **View, Table Font and Row**.
  - Clicking on

, the **Font** icon will open the font form where normal Windows functions are available.
  - Clicking on the **Color** icon will enable the selection of a color for the text.



- The **Notebook Topics** may be formatted using the formatting features above where the Notebook items are entered in the lower pane.
- Some forms may have the fonts for displaying data edited when there is a menu on the top left side with the **Table Font and Row** menu item.

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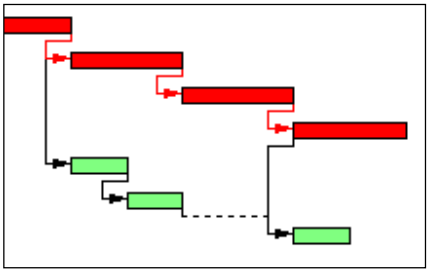
- The text in a **Text Box** that has been inserted onto the Bar Chart may be formatted when the box is created.

8.10 Format Colors

These are the main options for formatting colors:

- **Band** colors in layouts are formatted in the **Group and Sort** form by clicking on the icon or selecting **View, Group and Sort by**.
- **Text** colors are covered in the **Format Font and Colors** paragraph.
- **Bar Colors** are covered in the **Formatting the Bars** paragraph.
- **Timescale** and **Column Headers** are covered in the **Format Timescale Command** paragraph.
- **Sight Lines (Gridline)** colors may not be formatted.
- The **Progress Line** color is selected in the **Bar Chart Options** form, **Progress Line** tab.
- The **Data Date** is formatted in the **Bar Options** form, **Data Date** tab.
- The **Relationship Lines**, also known as **Dependencies**, **Logic**, or **Links**, may not be formatted and are displayed with the following characteristics:
  - Solid Red for Critical,
  - Solid Black for Driving,
  - Dotted Black for Non-driving, and
  - Blue when selected and may be deleted.



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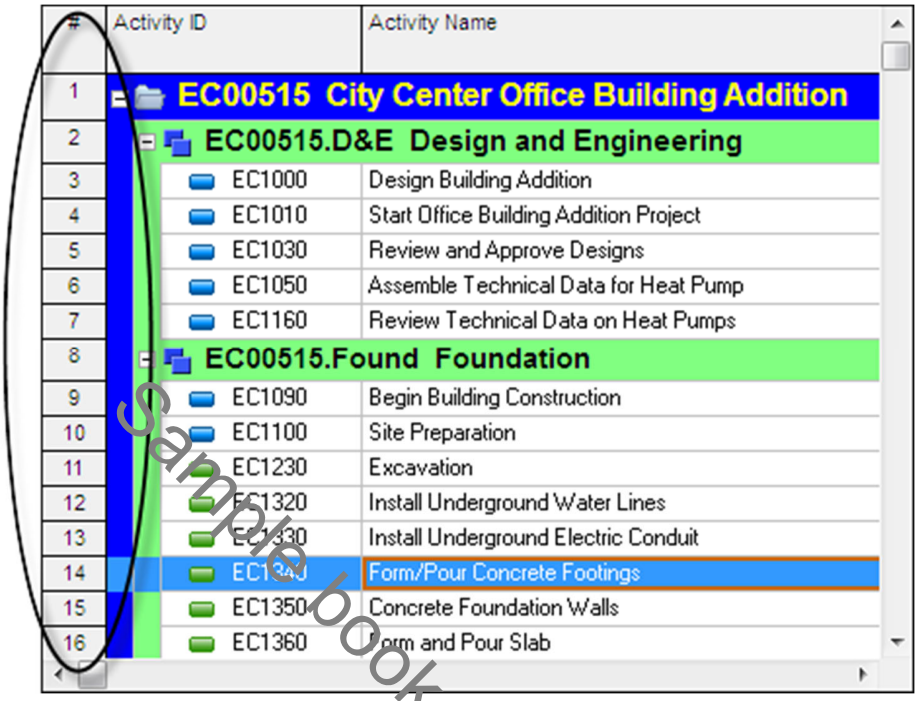
8.11 Line Numbers

Version 8.2 introduced a Microsoft Project style **Line Numbers**. Select **View**, **Line** Number to display or hide the Line Number.



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This is a very useful feature for reviewing a schedule to ensure that everyone in a meeting is looking at the same activity.

But as in Microsoft Project and Elecosoft (Asta) Powerproject this is an activity order and the number will change if the schedule is reordered.

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8.12 Workshop 6 – Formatting the Bar Chart

Background

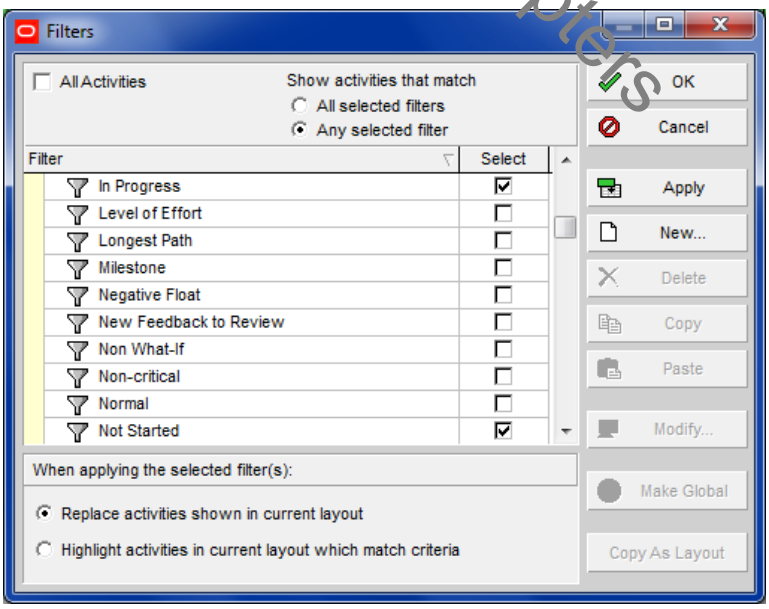
Management has received your draft report and requests that some changes be made to the presentation.

Assignment

Format your schedule as follows, but depending on the default settings, your Gantt Chart View may differ from that shown, e.g., there may be no summary bars:

1. You will not have to complete the Step 2 of this workshop if you have internet access and are able to download the **www.primavera.com.au_Layout.plf** layout from www.primavera.com.au. There are layouts for later P6 Versions which are identified by the software version in the file name.
   - If you have downloaded and applied the **www.primavera.com.au_Layout.plf** move to Step 3, DO NOT COMPLETE Step 2.
   - If you have NOT downloaded and applied the **www.primavera.com.au_Layout.plf** complete Step 2.
2. Format Bars, if you are unable to download the **www.primavera.com.au_Layout.plf** layout then:
   - To format the bars open the **Bars** form,
   - Click on the Default button to set the bars to the Primavera default settings,
   - Edit the **Float Bar** Filter (**Total Float** bar) so it only shows float for Not Started or In Progress activities. Ensure you select the **Any selected filter** in the **Filters** form:

Display	Name	Timescale	User Start Date	User Finish Date	Filter	Preview
☑	Float Bar	Float Bar			Not Started or In Progress	



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- Delete the **Secondary Baseline** & **Tertiary Baseline** bars,
- Move the Baseline bars and Baseline Milestones to the bottom of the Bars form to remove relationships on the Baseline bars,
- Add missing Project Baseline Milestone and format the Baseline bars as per the picture below, making them different colors:

Display	Name	Timescale	User S	User F	Filter	Preview
☐	Project Baseline Bar	Project Baseline Bar			Normal	
☐	Project Baseline Milestone	Project Baseline Bar			Milestone	▼ ▼
☐	Primary Baseline	Primary Baseline Bar			Normal	
☐	Primary Baseline Milestone	Primary Baseline Bar			Milestone	△ △

- Remove all text from all bars, except from the **Current Bar Labels** bar, by:
  - Clicking on the **Bar Labels** tab at the bottom,
  - Clicking on one bar at a time and using the Delete button at the bottom (NOT SIDE) of the screen to delete the text line,
  - Change the **Current Bar Labels** bar filter to read All Activities and do not display.

3. Display the following bars:
   - Remaining Level of Effort
   - Actual Level of Effort
   - Actual Work
   - Remaining Work
   - Remaining Critical Work
   - Milestones
   - % Complete
   - Summary Bar
   - Float Bar (Total Float)
   - Negative Float Bar
4. Adding Columns:
   - Add **Calendar** and **Activity Type** columns, from the **General** section of the **Columns** form, to the right of the Activity Name column.
   - Adjust the column widths to a best fit by dragging the column header divider lines.
   - Display the **Total Float** column if not displayed.
5. Press the **F9** key and click the Schedule button which will schedule the project and calculate the float.
6. Adjusting Row Heights:
   - Change the Row Height to 30 points by selecting **View, Table Font and Row** and apply,
   - Now check the **Optimize height by row content** box, not exceeding 1 line per row and apply,
   - Now change the setting to 18 point height for all rows and apply.
   - Click on OK to close the form.

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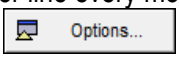
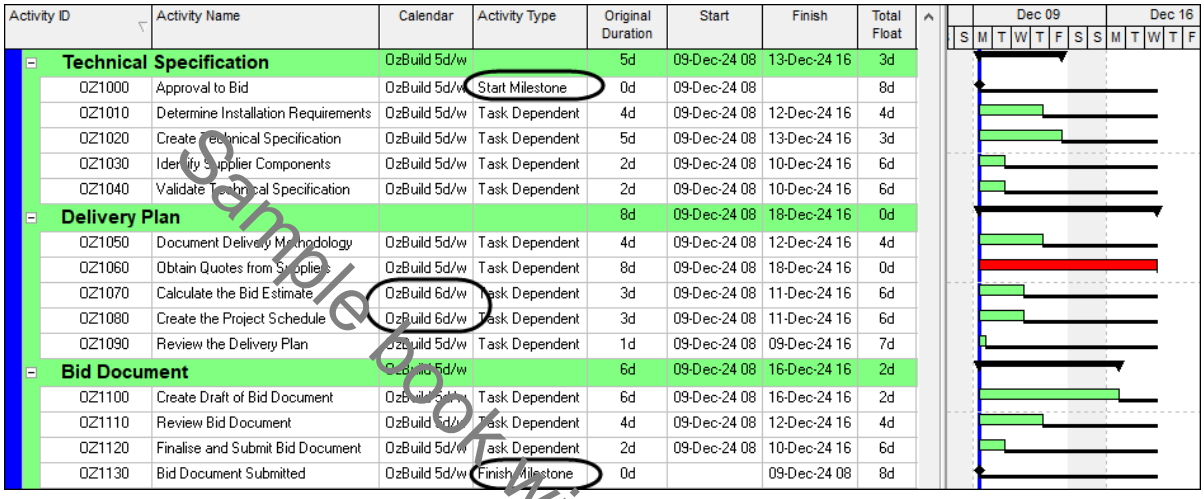
7. Format Timescale to Year and Month, then Week and Day (two options), then Month and Week by using the buttons.
8. Format the Vertical lines with a solid Major line every month and a Minor line every week by selecting **View**, **Bars** and clicking on the  button and selecting the **Sight Lines** tab, or right-clicking in the Gantt Chart area and selecting **Bar Chart Options…** and selecting the **Sight Lines** tab.
9. Expand and contract the timescale and adjust it so that all the bars are visible.
10. See below for the expected results:



Activity ID	Activity Name	Calendar	Activity Type	Original Duration	Start	Finish	Total Float
Technical Specification		OzBuild 5d/w		5d	09-Dec-24 08	13-Dec-24 16	3d
OZ1000	Approval to Bid	OzBuild 5d/w	Start Milestone	0d	09-Dec-24 08		8d
OZ1010	Determine Installation Requirements	OzBuild 5d/w	Task Dependent	4d	09-Dec-24 08	12-Dec-24 16	4d
OZ1020	Create Technical Specification	OzBuild 5d/w	Task Dependent	5d	09-Dec-24 08	13-Dec-24 16	3d
OZ1030	Identify Supplier Components	OzBuild 5d/w	Task Dependent	2d	09-Dec-24 08	10-Dec-24 16	6d
OZ1040	Validate Technical Specification	OzBuild 5d/w	Task Dependent	2d	09-Dec-24 08	10-Dec-24 16	6d
Delivery Plan				8d	09-Dec-24 08	18-Dec-24 16	0d
OZ1050	Document Delivery Methodology	OzBuild 5d/w	Task Dependent	4d	09-Dec-24 08	12-Dec-24 16	4d
OZ1060	Obtain Quotes from Suppliers	OzBuild 5d/w	Task Dependent	8d	09-Dec-24 08	18-Dec-24 16	0d
OZ1070	Calculate the Bid Estimate	OzBuild 6d/w	Task Dependent	3d	09-Dec-24 08	11-Dec-24 16	6d
OZ1080	Create the Project Schedule	OzBuild 6d/w	Task Dependent	3d	09-Dec-24 08	11-Dec-24 16	6d
OZ1090	Review the Delivery Plan	OzBuild 5d/w	Task Dependent	1d	09-Dec-24 08	09-Dec-24 16	7d
Bid Document		OzBuild 5d/w		6d	09-Dec-24 08	16-Dec-24 16	2d
OZ1100	Create Draft of Bid Document	OzBuild 5d/w	Task Dependent	6d	09-Dec-24 08	16-Dec-24 16	2d
OZ1110	Review Bid Document	OzBuild 5d/w	Task Dependent	4d	09-Dec-24 08	12-Dec-24 16	4d
OZ1120	Finalise and Submit Bid Document	OzBuild 5d/w	Task Dependent	2d	09-Dec-24 08	10-Dec-24 16	6d
OZ1130	Bid Document Submitted	OzBuild 5d/w	Finish Milestone	0d		09-Dec-24 08	8d

11. Check the following:
    - Click on Activity ID to make sure they are ordered correctly,
    - The dates and times of all activities should start and finish at the same time of the day,
    - Activity OZ1060 bar should be colored red as it is the Critical activity representing the shortest duration that the project may be completed,
    - All other activities should have Float.

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13 FILTERS

This chapter covers the ability of Primavera to control which activities are displayed, both on the screen and in printouts, by using **Filters**.

13.1 Understanding Filters

Primavera has an ability to display activities that meet specific criteria. You may want to see only the incomplete activities, or the work scheduled for the next couple of months or weeks, or the activities that are in-progress.

Primavera defaults to displaying all activities. There are a number of pre-defined filters available that you may use or edit. You may also create one or more of your own.

A filter may be applied to display or to highlight only those activities that meet a criterion.

There are four types of filters:

- **Default** filters which are supplied with the system and may not be edited or deleted but may be copied and then edited or modified and are often used in conjunction with the display of bars.
- **Global** filters which are made available to anyone working in the database,
- **User Defined** filters which are defined by a user and available only to that user unless it is made into a **Global** filter, and
- **Layout** filters which make a copy of the filter only available when the current layout is applied. **NOTE:** If the current layout is a **Project** layout then this effectively makes the **Layout** filter a project filter.

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The following types of filters are not available:

- Drop-down or Auto filters as in Excel and Microsoft Project.
- Interactive filters as available in SureTrak, Elecosoft (Asta) Powerproject and Microsoft Project. This is when a filter is applied and the user is offered choices from a drop-down list. The lack of this function may result in an excessive quantity of filters being generated or the user continually editing frequently used filters.
- Project filters, but copying all the filters used in a project to all the Project Layouts effectively creates Project filters but this is a lot of administration.

On the other hand, P6 does allow multiple filters to be applied at the same time.

There are no dedicated project filters (except by creating a Layout filter) available in Primavera, so you might consider placing the project name or number at the start of a filter name so you may identify which filters belong to which projects. This is especially helpful when you have a number of **User Filters** or there are a number of **Global Filters**.

Topic	Menu Command
• To apply, edit, create, or delete a filter open the **Filters** form.	• Click on the icon, or • Select **View, Filter By…, Customize**, or • Right-click in the columns area and select **Filters…**.

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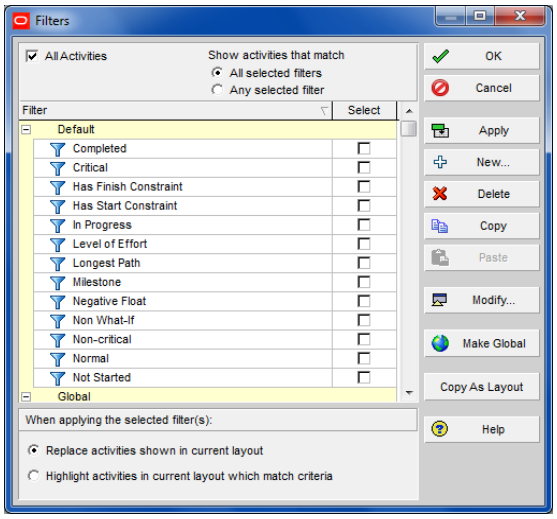
13.2 Applying a Filter



13.2.1 Filters Form

Filters are applied from the **Filters** form which may be opened by:

- Clicking on the icon, or
- Selecting **View, Filters…**, Customize…or
- Right-clicking in the columns area and selecting **Filters…**

NOTE: If the **All Activities** check box is not checked then there is a filter applied.

13.2.2 Applying a Single Filter

A single filter is applied by:

- Checking the **Select** check box beside one filter, and
- Clicking on the Apply icon to apply the filter and not close the form. If the result is undesirable another option may be selected, or
- Clicking on OK to apply the filter and close the form.
- When applying the selected filter(s):
  - Only activities that comply to the filter criteria will be displayed when the **Replace activities shown in the current layout** button is checked.
  - These activities will be highlighted in the **Select Activity** color when the **Highlight activities in current layout which match criteria** button is checked.

13.2.3 Applying a Combination Filter

A combination filter has two or more filters selected and has two options under **Show activities that match**:

- **All selected filters** where an activity to be displayed or highlighted has to match the criteria of **ALL** the filters, or
- **Any selected filters** where an activity to be displayed or highlighted has to match the criteria of **ONLY ONE** filter.

In many places in the software there will be an option of either clicking on the OK icon or the Apply icon:

- The Apply icon applies the format yet leaves the form open.
- The OK icon applies the format and closes the form.

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13.3 Creating and Modifying a Filter

13.3.1 Creating a New Filter

Filters may be created from the **Filters** form by:

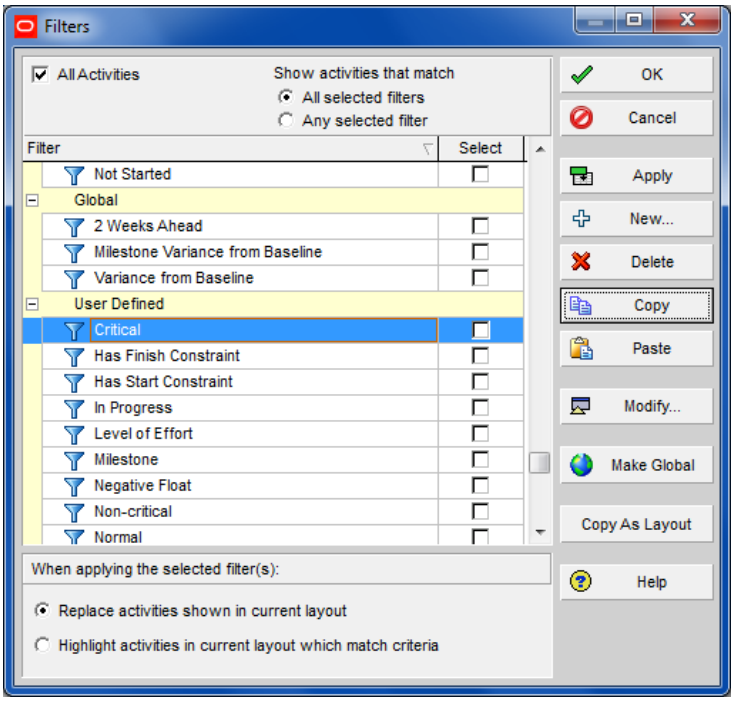
- Clicking on the

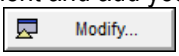
icon in the **Filter** form and create a new filter, or
- Copying an existing filter using the

and

icons and then editing the new filter.

New filters will be created in the **User Defined** filter area at the bottom of the list.

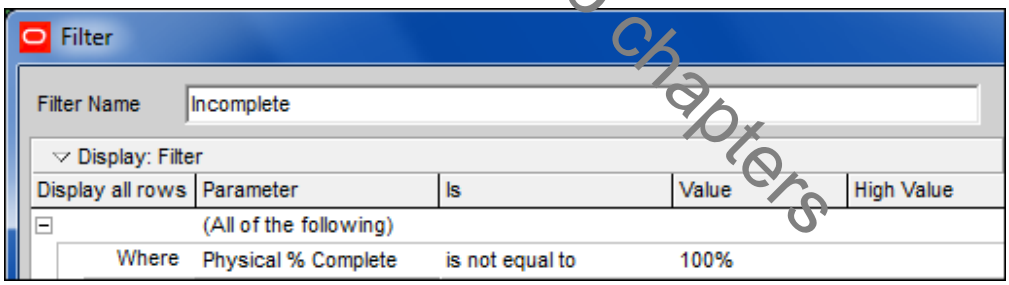


There are a large number of options available to create a filter and from the following examples you should be able to experiment and add your own filters. To modify an existing filter, select it from the **Filters** form and click the 

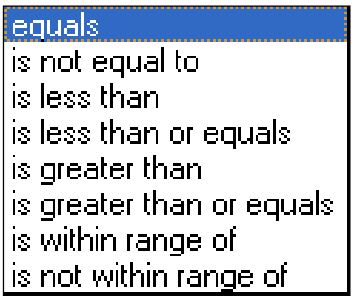
icon.

13.3.2 One Parameter Filter

The following example is a filter to display incomplete activities:



- **Parameter** is used to select any of the available database fields:
  - Select one of the options from the **Is** drop-down box:
  - The parameter selected in the **Is** box determines if:
    - Only one **Value** is required, which is entered into the **Value** field, or
    - A range is required and two values are to be entered; then the **Value** and **High Value** are entered.



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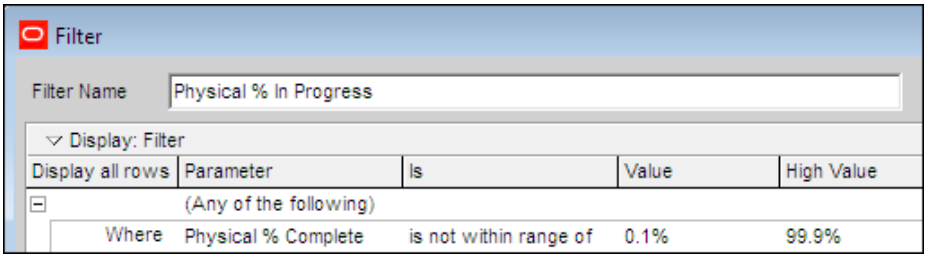
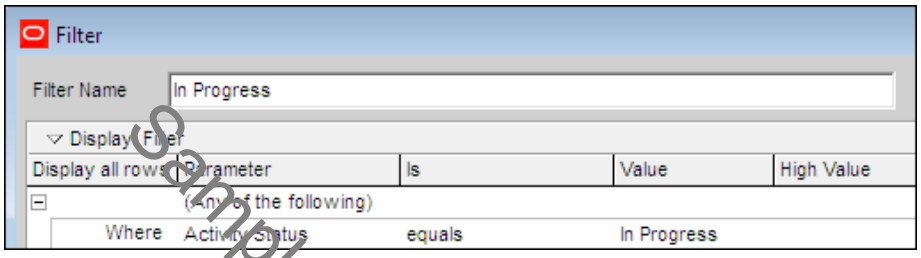
The following example is a filter to display in-progress activities using the **is not within range of** and **Value** and **High Value** options:

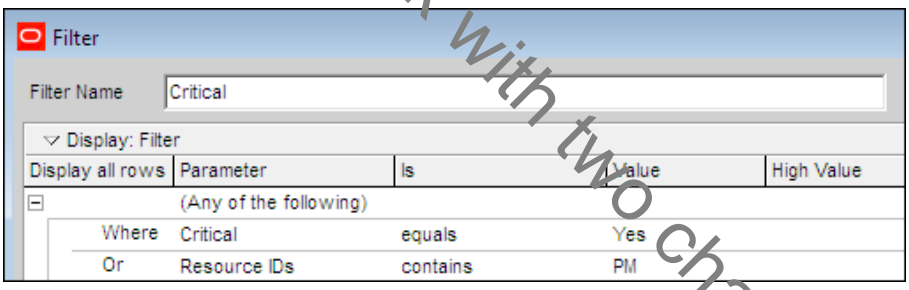


And this example uses the **equals** parameter and only the **Value** field is completed:



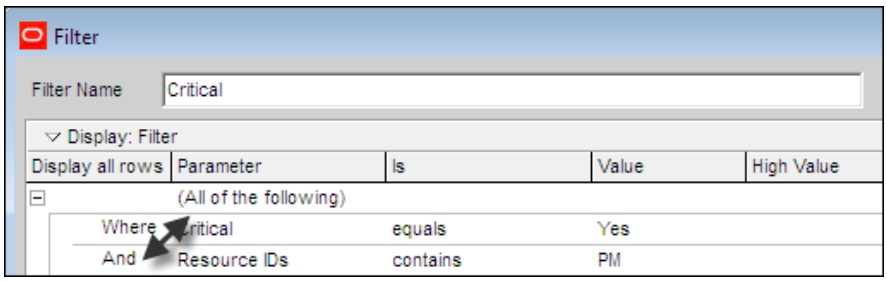
13.3.3 Two Parameter Filter

The following example is a filter to display all critical path activities and activities assigned the PM resource:



- The drop-down box under **Parameter** has two options:
  - **(All of the following)**. This is used when an activity must meet all of the parameters selected below.
  - **(Any of the following)**. This is used when an activity must meet any of the parameters selected below.

When the first parameter is change to **All of the following** the **Display all rows** option changes to an **AND**. Therefore, with the filter below there would normally be fewer activities displayed as the activities have to be critical and assigned the resource PM:



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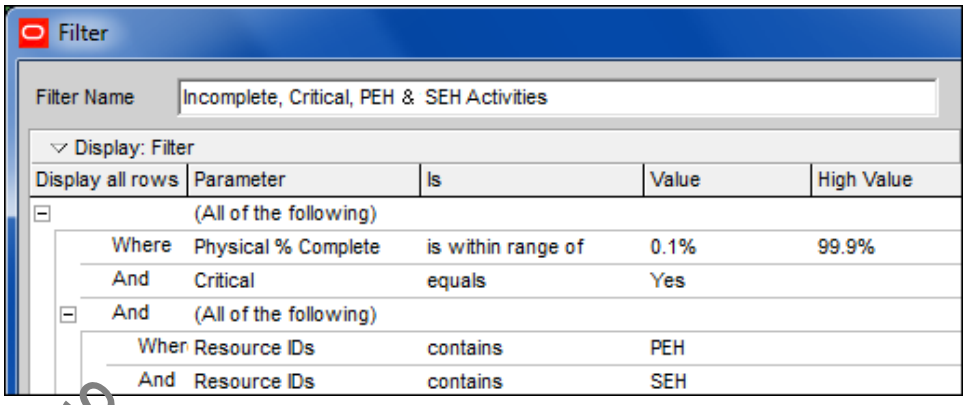
13.3.4 Multiple Parameter Filter

The following example is a filter to display incomplete activities on the critical path with resources PEH and SEH:

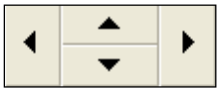


- In this example, **(All of the following)** was selected from the **Parameters** drop-down box which enables a nesting effect of filter parameters.

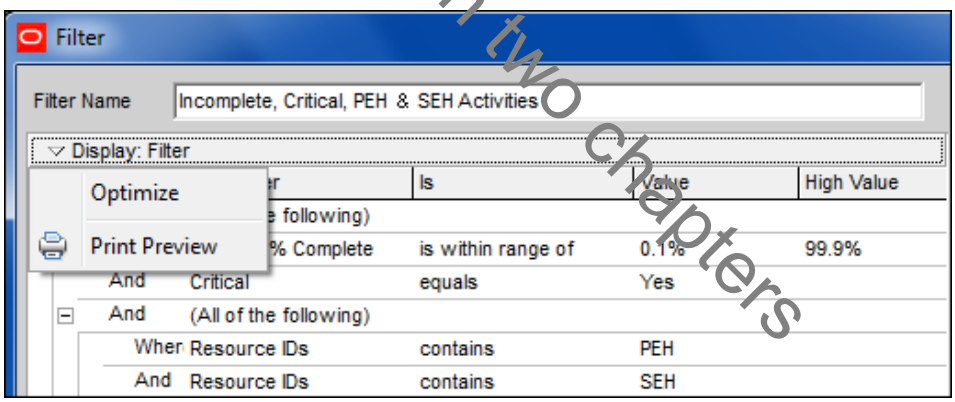
13.3.5 Editing and Organizing Filter Parameters

Lines in a filter are added, copied, pasted, and deleted using the appropriate icons in the **Filters** form.

The arrows allow the filter lines to be moved up and down and indented to the left and outdented to the right in a similar way to indenting and outdenting tasks in Microsoft Project.



A filter may be optimized to delete the redundant filter lines using the **Optimize** command:



13.3.6 Understanding Resource Filters

NOTE: THIS IS A VERY IMPORTANT POINT FOR RESOURCE FILTERING

When filtering on resources, the filter must use the option of **contains** in the **Is** column and not **equals**. This is because when an activity has been assigned more than one resource, then the activity will not be selected with a filter using the **equals** parameter.

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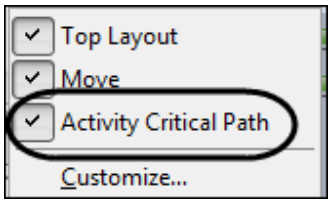
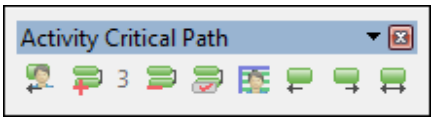
13.4 Activity Critical Path Visibility

There is a new toolbar in Version 21 titled **Activity Critical Path**.



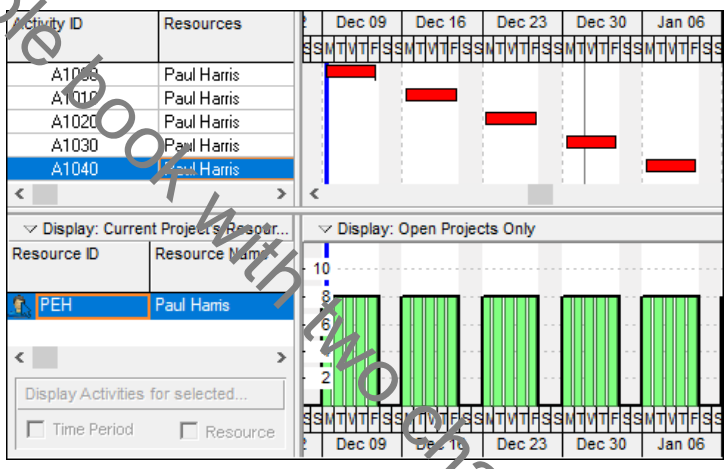
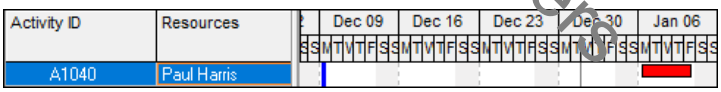
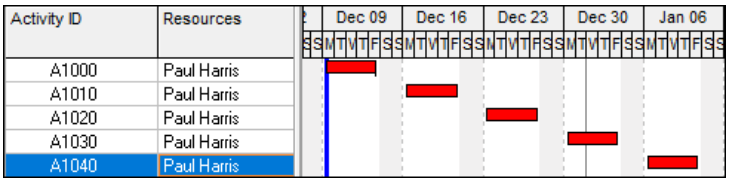
- The toolbar is displayed by right clicking on any toolbar and checking the **Activity Critical Path** option:

- This will display the toolbar:



- **IMPORTANT NOTE**: Clicking on a button will activate the command and clicking again will deactivate the command

We will work through the icons one at a time and explain how the functions work.

Button	Title	Function
	Backward Resource Driven Critical Path	The schedule below has no relationships between activities and has been levelled.  When selecting A1040 and **Backward Activity Critical Path** you will see the result below:  When selecting A1040 and **Backward Resource Driven Critical Path** you will see the result below:  **Note:** Reviev the **Backward Activity Critical Path** now and then come back and review this one.

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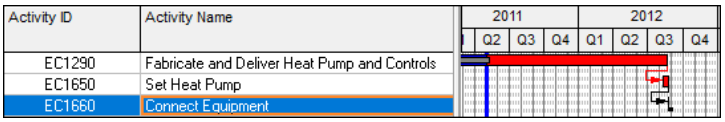
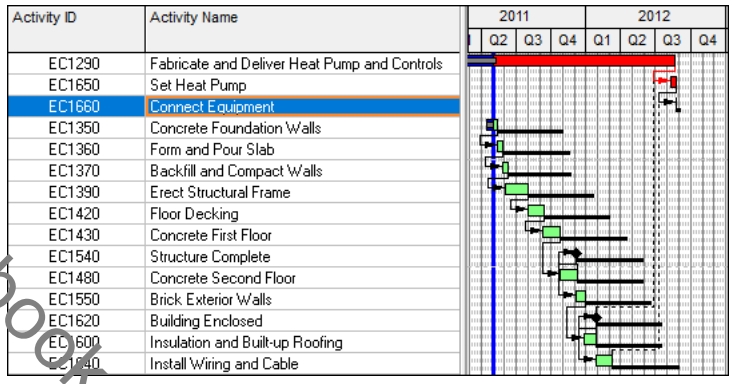
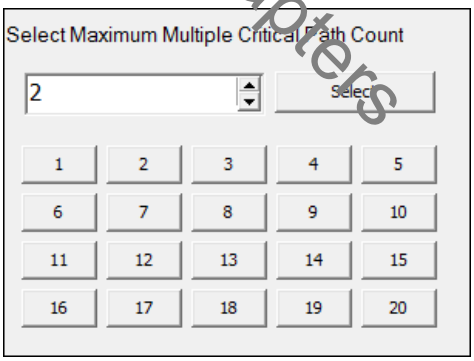
	Increase Maximum Multiple Critical Path Counts	This increases the value of the **Maximum Multiple Critical Path Counts** which is displayed in the button below.
	Maximum Critical Path Count	This is not a command button but displays the number of **Maximum Critical Paths** that has been set by the user. Selecting one **Maximum Critical Path Count:**  Selecting two **Maximum Critical Path Count:**  Thus this command determines how many chains of events you wish to see.
	Decrease Maximum Multiple Critical Path Counts	This decreases the value of the **Maximum Multiple Critical Path Counts** which is displayed in the button above.
	Select Maximum Multiple Critical Path Counts	This opens a form allowing the setting of the **Maximum Multiple Critical Path Counts**. 

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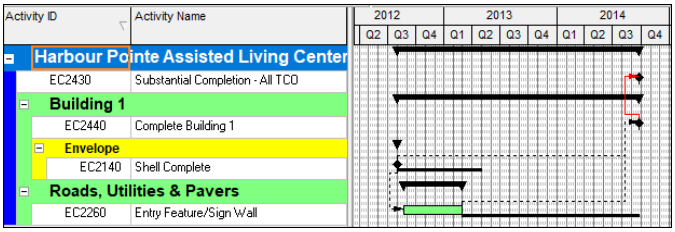
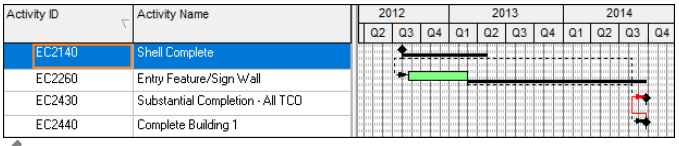
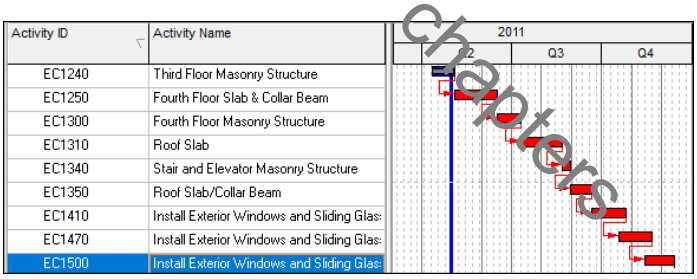
	Enable Group and Sort	Clicking this button hides and displays the current applied Group and Sort bands. Hiding the bands enables the user to see the chain of events as an uninterrupted single chain of activities: Group and Sort enabled:  Group and Sort disabled: 
	Backward Activity Critical Path	This option displays the chain of events before a selected activity that has the least amount of Float. If there is a critical path it will display this and if there is not, then it will find the chain of events with the lease amount of float to the start of the project and display this as the **Backward Activity Critical Path**. The picture below displays the **Backward Activity Critical Path** from activity EC1500, which is a chain of events that is on the schedule Critical Path. 

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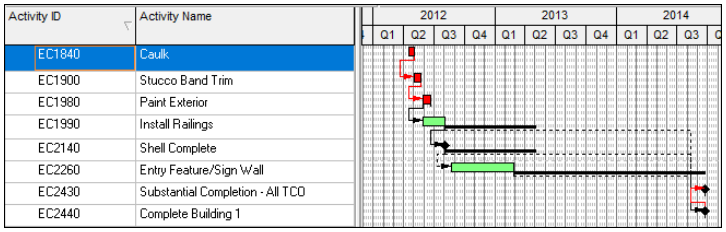
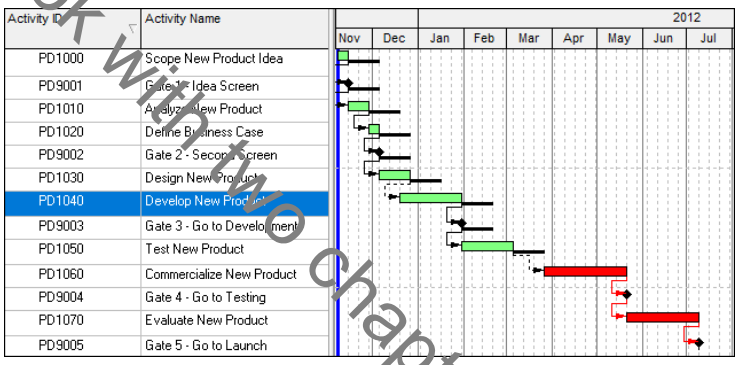
	Forward Activity Critical Path	This option displays the chain of events after a selected activity that has the least amount of Float. If there is a critical path it will display this path and if there is not, then it will find the chain of events with the lease amount of float to the end of the project and display this as the **Forward Activity Critical Path**. The picture below displays the **Forward Activity Critical Path** from activity EC1840, which is a chain of events that is not on the schedule Critical Path. 
	Activity Critical Path	This option displays the chain of events before and after a selected activity that has the least amount of Float, as per the parameters above. Thus, the picture below shows both the **Forward Activity Critical Path** and **Backward Activity Critical Path** from Activity PD1040. 

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13.5 Workshop 11 – Filters

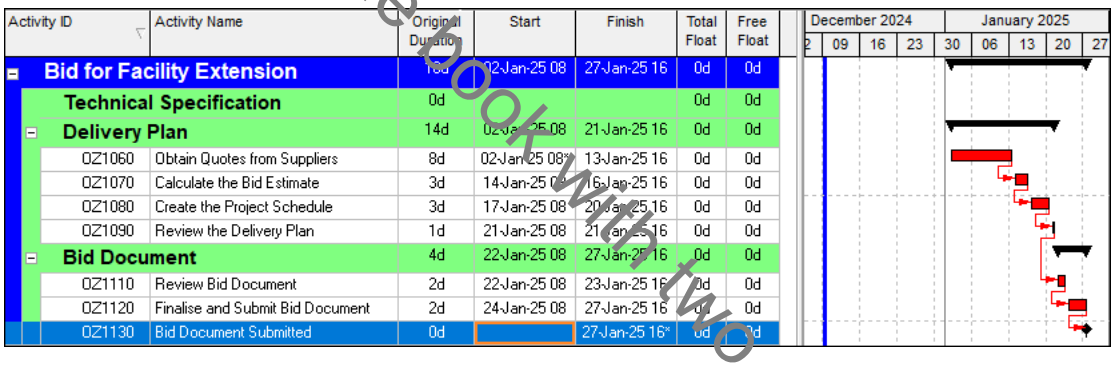
Background

Management has asked for reports on activities to suit their requirements.

Assignment

Ensure your **OzBuild Bid** project is open.

1. Apply the **OzBuild Workshop 10 – With Float** layout.
2. They would like to see all the critical activities.
   - Ensure a column showing the **Total Float** is displayed, and
   - Apply the **Critical** activities filter.
3. You will see only activities that are on the critical path.



Activity ID	Activity Name	Original Duration	Start	Finish	Total Float	Free Float
Bid for Facility Extension			02-Jan-25 08	27-Jan-25 16	0d	0d
Technical Specification		0d			0d	0d
Delivery Plan		14d	02-Jan-25 08	21-Jan-25 16	0d	0d
OZ1060	Obtain Quotes from Suppliers	8d	02-Jan-25 08	13-Jan-25 16	0d	0d
OZ1070	Calculate the Bid Estimate	3d	14-Jan-25 08	16-Jan-25 16	0d	0d
OZ1080	Create the Project Schedule	3d	17-Jan-25 08	20-Jan-25 16	0d	0d
OZ1090	Review the Delivery Plan	1d	21-Jan-25 08	21-Jan-25 16	0d	0d
Bid Document		4d	22-Jan-25 08	27-Jan-25 16	0d	0d
OZ1110	Review Bid Document	2d	22-Jan-25 08	23-Jan-25 16	0d	0d
OZ1120	Finalise and Submit Bid Document	2d	24-Jan-25 08	27-Jan-25 16	0d	0d
OZ1130	Bid Document Submitted	0d		27-Jan-25 16*	0d	0d

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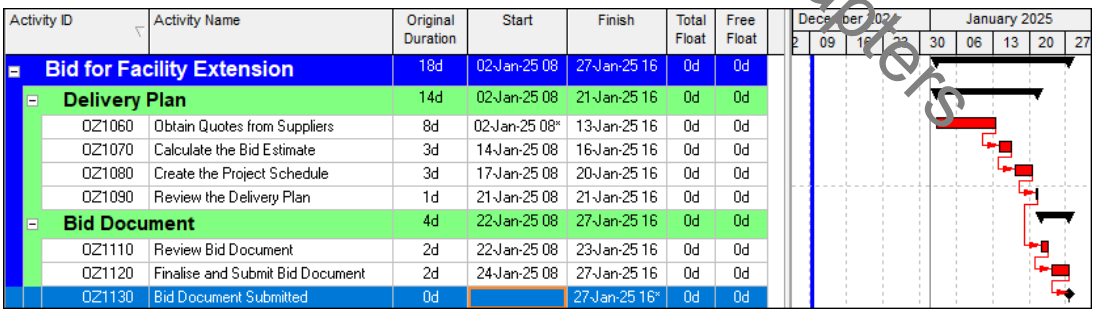
4. Open the **Group and Sort** form and check the **Hide if empty** box and notice the **Technical Specification** band is hidden because it has no activities displayed.



Activity ID	Activity Name	Original Duration	Start	Finish	Total Float	Free Float
Bid for Facility Extension		18d	02-Jan-25 08	27-Jan-25 16	0d	0d
Delivery Plan		14d	02-Jan-25 08	21-Jan-25 16	0d	0d
OZ1060	Obtain Quotes from Suppliers	8d	02-Jan-25 08*	13-Jan-25 16	0d	0d
OZ1070	Calculate the Bid Estimate	3d	14-Jan-25 08	16-Jan-25 16	0d	0d
OZ1080	Create the Project Schedule	3d	17-Jan-25 08	20-Jan-25 16	0d	0d
OZ1090	Review the Delivery Plan	1d	21-Jan-25 08	21-Jan-25 16	0d	0d
Bid Document		4d	22-Jan-25 08	27-Jan-25 16	0d	0d
OZ1110	Review Bid Document	2d	22-Jan-25 08	23-Jan-25 16	0d	0d
OZ1120	Finalise and Submit Bid Document	2d	24-Jan-25 08	27-Jan-25 16	0d	0d
OZ1130	Bid Document Submitted	0d		27-Jan-25 16*	0d	0d

5. Now apply some other filters such as the **Milestone**, **Has Start Constraint** and **Has Finish Constraint**.
6. There are two activities with 6 days Total Float, OZ1040, OZ1050 and OZ1100, see the picture below:

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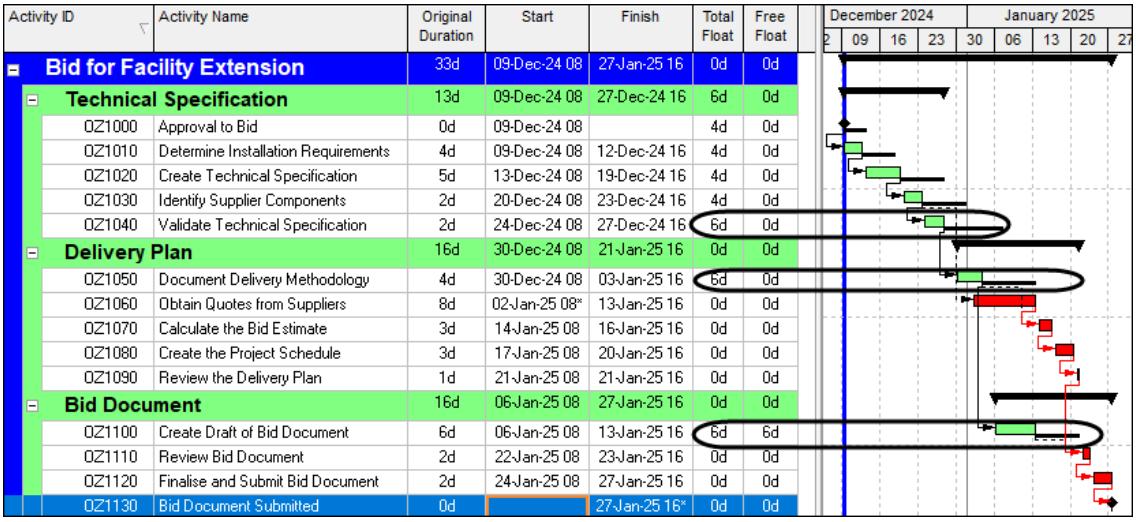

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float	Free Float
Bid for Facility Extension		33d	09-Dec-24 08	27-Jan-25 16	0d	0d
Technical Specification		13d	09-Dec-24 08	27-Dec-24 16	6d	0d
OZ1000	Approval to Bid	0d	09-Dec-24 08		4d	0d
OZ1010	Determine Installation Requirements	4d	09-Dec-24 08	12-Dec-24 16	4d	0d
OZ1020	Create Technical Specification	5d	13-Dec-24 08	19-Dec-24 16	4d	0d
OZ1030	Identify Supplier Components	2d	20-Dec-24 08	23-Dec-24 16	4d	0d
OZ1040	Validate Technical Specification	2d	24-Dec-24 08	27-Dec-24 16	6d	0d
Delivery Plan		16d	30-Dec-24 08	21-Jan-25 16	0d	0d
OZ1050	Document Delivery Methodology	4d	30-Dec-24 08	03-Jan-25 16	6d	0d
OZ1060	Obtain Quotes from Suppliers	8d	02-Jan-25 08*	13-Jan-25 16	0d	0d
OZ1070	Calculate the Bid Estimate	3d	14-Jan-25 08	16-Jan-25 16	0d	0d
OZ1080	Create the Project Schedule	3d	17-Jan-25 08	20-Jan-25 16	0d	0d
OZ1090	Review the Delivery Plan	1d	21-Jan-25 08	21-Jan-25 16	0d	0d
Bid Document		16d	06-Jan-25 08	27-Jan-25 16	0d	0d
OZ1100	Create Draft of Bid Document	6d	06-Jan-25 08	13-Jan-25 16	6d	6d
OZ1110	Review Bid Document	2d	22-Jan-25 08	23-Jan-25 16	0d	0d
OZ1120	Finalise and Submit Bid Document	2d	24-Jan-25 08	27-Jan-25 16	0d	0d
OZ1130	Bid Document Submitted	0d		27-Jan-25 16*	0d	0d

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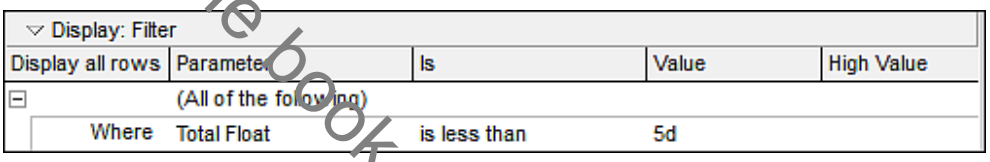
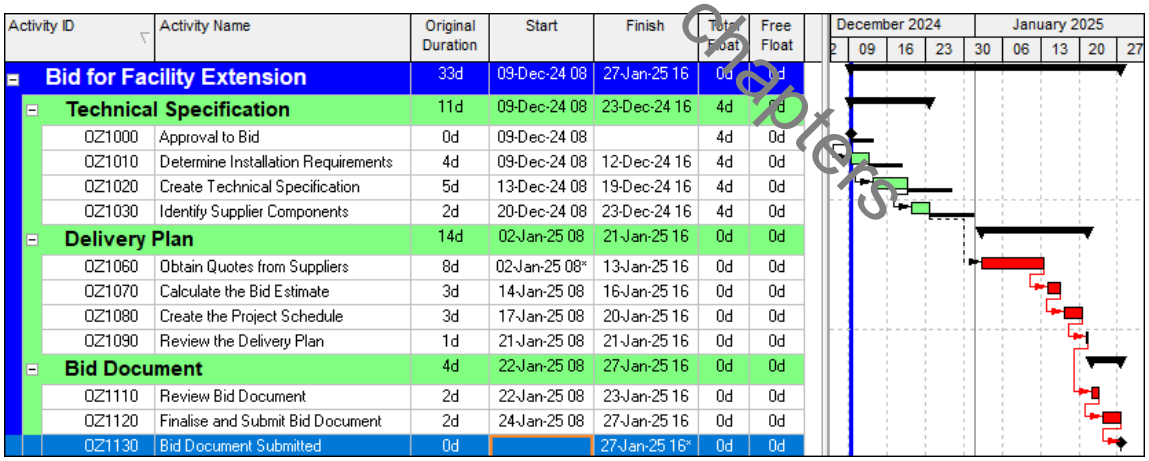
7. Management would like to see all the activities with float less than or equal to 5 days:
   - Create a new filter titled: **Total Float Less Than or Equal to 5 Days**, and
   - Add the condition to display a total float of less than 5 days.



Display: Filter

Display all rows	Parameter	Is	Value	High Value
	(All of the following)			
Where	Total Float	is less than	5d	

   - Close the **Filter** form,
   - Click on the **All Activities** check box to ensure all activities are displayed,
   - Apply the new filter **Total Float Less Than or Equal to 5 Days**,
   - You should find that three activities with more than 6 days float are hidden:



Activity ID	Activity Name	Original Duration	Start	Finish	Total Float	Free Float
Bid for Facility Extension		33d	09-Dec-24 08	27-Jan-25 16	0d	0d
Technical Specification		11d	09-Dec-24 08	23-Dec-24 16	4d	0d
OZ1000	Approval to Bid	0d	09-Dec-24 08		4d	0d
OZ1010	Determine Installation Requirements	4d	09-Dec-24 08	12-Dec-24 16	4d	0d
OZ1020	Create Technical Specification	5d	13-Dec-24 08	19-Dec-24 16	4d	0d
OZ1030	Identify Supplier Components	2d	20-Dec-24 08	23-Dec-24 16	4d	0d
Delivery Plan		14d	02-Jan-25 08	21-Jan-25 16	0d	0d
OZ1060	Obtain Quotes from Suppliers	8d	02-Jan-25 08*	13-Jan-25 16	0d	0d
OZ1070	Calculate the Bid Estimate	3d	14-Jan-25 08	16-Jan-25 16	0d	0d
OZ1080	Create the Project Schedule	3d	17-Jan-25 08	20-Jan-25 16	0d	0d
OZ1090	Review the Delivery Plan	1d	21-Jan-25 08	21-Jan-25 16	0d	0d
Bid Document		4d	22-Jan-25 08	27-Jan-25 16	0d	0d
OZ1110	Review Bid Document	2d	22-Jan-25 08	23-Jan-25 16	0d	0d
OZ1120	Finalise and Submit Bid Document	2d	24-Jan-25 08	27-Jan-25 16	0d	0d
OZ1130	Bid Document Submitted	0d		27-Jan-25 16*	0d	0d

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8. They would like to see all the activities that are critical or contain the word "Bid".
   - Copy the **Critical** filter,
   - Edit the filter title to read: **Critical or Contains "Bid"**
   - Edit the top line to read **(Any of the following)**,

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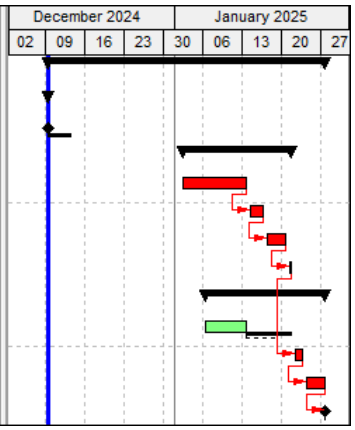
- Add the condition: **Or** Name (Activity Name) contains **Bid**, and

Filter Name	Critical or Contains "Bid"			
Display: Filter				
Display all rows	Parameter	Is	Value	High Value
	(Any of the following)			
Where	Critical	equals	Yes	
Or	Activity Name	contains	bid	

- **Note:** The text is not case sensitive,
- Apply the filter.

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float	Free Float
Bid for Facility Extension		33d	09-Dec-24 08	27-Jan-25 16	0d	0d
Technical Specification		0d	09-Dec-24 08	09-Dec-24 08	4d	0d
OZ1000	Approval to Bid	0d	09-Dec-24 08		4d	0d
Delivery Plan		14d	02-Jan-25 08	21-Jan-25 16	0d	0d
OZ1060	Obtain Quotes from Suppliers	8d	02-Jan-25 08*	13-Jan-25 16	0d	0d
OZ1070	Calculate the Bid Estimate	3d	14-Jan-25 08	16-Jan-25 16	0d	0d
OZ1080	Create the Project Schedule	3d	17-Jan-25 08	20-Jan-25 16	0d	0d
OZ1090	Review the Delivery Plan	d	21-Jan-25 08	21-Jan-25 16	0d	0d
Bid Document		16d	06-Jan-25 08	27-Jan-25 16	0d	0d
OZ1100	Create Draft of Bid Document	6d	06-Jan-25 08	13-Jan-25 16	6d	6d
OZ1110	Review Bid Document	2d	22-Jan-25 08	23-Jan-25 16	0d	0d
OZ1120	Finalise and Submit Bid Document	2d	24-Jan-25 08	27-Jan-25 16	0d	0d
OZ1130	Bid Document Submitted	0d		27-Jan-25 16*	0d	0d



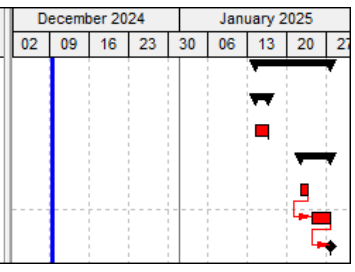
Sample book with two chapters

9. All the activities are either Critical or contain the word Bid.
10. Copy the filter and rename it **Critical and Contains "Bid"**

Filter Name	Critical and Contains "Bid"			
Display: Filter				
Display all rows	Parameter	Is	Value	High Value
	(All of the following)			
Where	Critical	equals	Yes	
And	Activity Name	contains	bid	

11. Now change the **(Any of the following)** option to **(All of the following)** apply the filter and see the effect.

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float	Free Float
Bid for Facility Extension		10d	14-Jan-25 08	27-Jan-25 16	0d	0d
Delivery Plan		3d	14-Jan-25 08	16-Jan-25 16	0d	0d
OZ1070	Calculate the Bid Estimate	3d	14-Jan-25 08	16-Jan-25 16	0d	0d
Bid Document		4d	22-Jan-25 08	27-Jan-25 16	0d	0d
OZ1110	Review Bid Document	2d	22-Jan-25 08	23-Jan-25 16	0d	0d
OZ1120	Finalise and Submit Bid Document	2d	24-Jan-25 08	27-Jan-25 16	0d	0d
OZ1130	Bid Document Submitted	0d		27-Jan-25 16*	0d	0d



12. There should be fewer activities and it is now displaying activities that meet both conditions of being Critical and contain the word Bid.
13. Now apply the **All Activities** filter to display all the activities.

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