

Milestones PROFESSIONAL[®] TUTORIALS

Lesson 17 - Work with a Baseline

In this lesson you will learn how to:

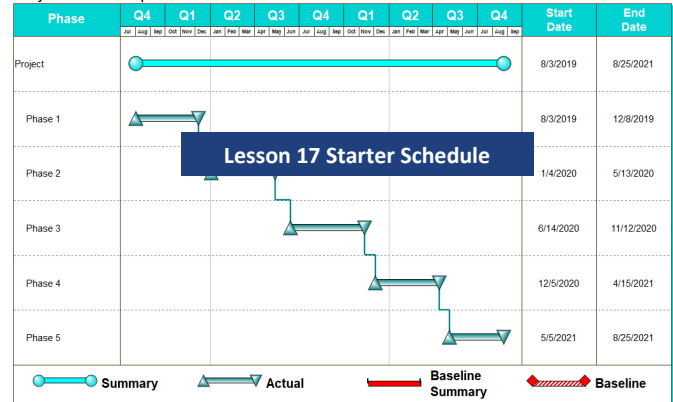
- Set up the baseline symbols, horizontal bars, and options using the Baseline Setup Wizard
- Insert a baseline
- Insert baseline start and end date columns
- Insert the baseline duration column
- Add a baseline to a blank schedule
- Add Symbol Automation Tag columns to show baseline start and end slip dates
- Add slips

Open the schedule for this lesson

1. On the toolbar, choose **File**.
2. In the **Files and Templates: Open and Save Options** section select **Open Samples or Lessons**. The **Open a Sample Chart** dialog displays.
3. Under **Select a Folder below to Open**, go to the bottom of the list select **Lessons**. The Lesson schedules will display in the window to the right.
4. Pick **Lesson 17 Starter Schedule.mlj**.
5. Save the schedule to an accessible folder on your computer. Choose the **File** tab. In the **Files and Templates: Open and Save Options** section, choose **Save As....** In the menu that displays choose **Chart**. Name, then save the schedule.

Baseline and Actual

Project Status Report



Set up the baseline symbols and horizontal bars using the Baseline Setup Wizard

The Baseline Setup Wizard guides you through setting up the symbology (symbols and bars) to be used for the task baseline display and for the summary bar baseline display.

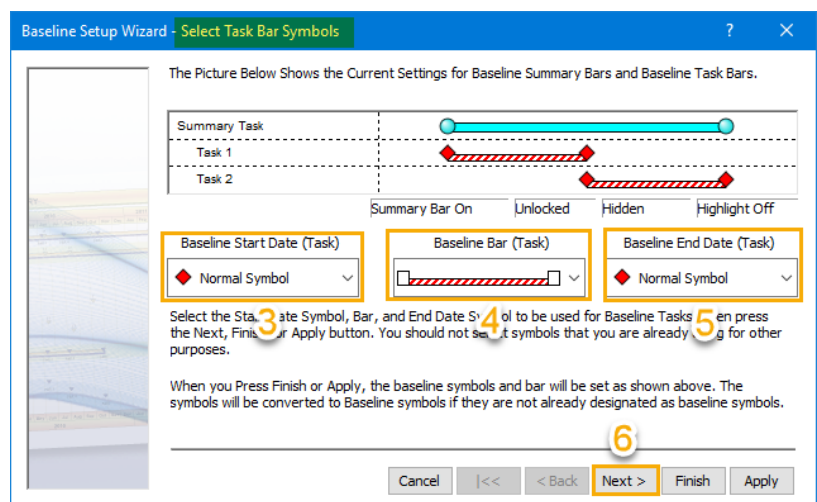
Set-up Baseline start symbol, Baseline horizontal bar, Baseline end symbol

Any number of symbols in the Milestones Professional toolbox can be set to be “baseline” symbols. These baseline symbols are treated differently than “normal” or “comment” symbols. In this lesson you will learn some of the special characteristics of baseline symbols. Since you can designate as many symbols as needed as baseline symbols it’s possible to show multiple baselines with unique symbology.

1. Choose the **View** tab.
2. In the **Baseline** section choose **Baseline Setup**. The **Baseline Setup Wizard - Select Task Bar Symbols** will display.
3. For **Baseline Start Date** choose the **first red diamond** from the list.

The selections for the symbols and horizontal bars are reflections of the symbols and bars in the schedule’s toolbox

4. For **Baseline Horizontal Bar** choose the **bar with red diagonal lines** from the list.
5. For **Baseline End Date** symbol choose the **second red diamond** from the list. This will be the symbol used to show the baseline finish dates.
6. Select **Next**. The **Baseline Setup Wizard - Select Summary Bar Symbols** window will display. Leave open and go to next page of this tutorial.

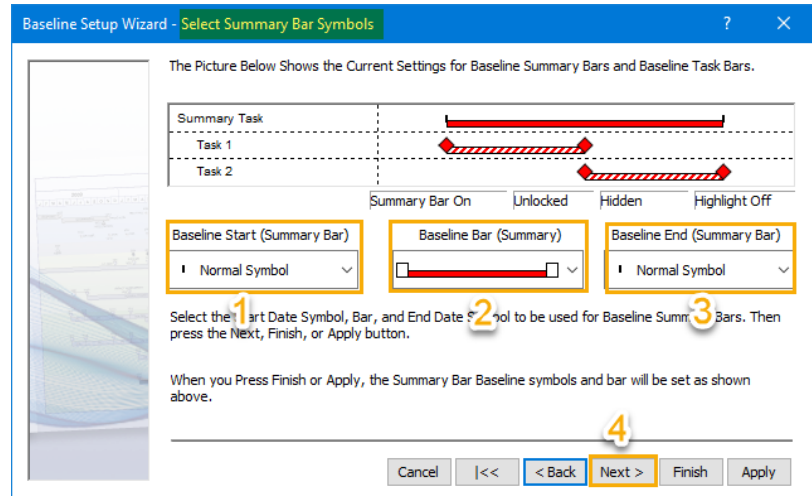


Set up the baseline using the Baseline Setup Wizard cont'd

Set-up Summary Baseline start symbol, Summary Baseline horizontal bar, Summary Baseline end symbol

In the **Baseline Setup Wizard - Select Summary Bar Symbols** window select the following:

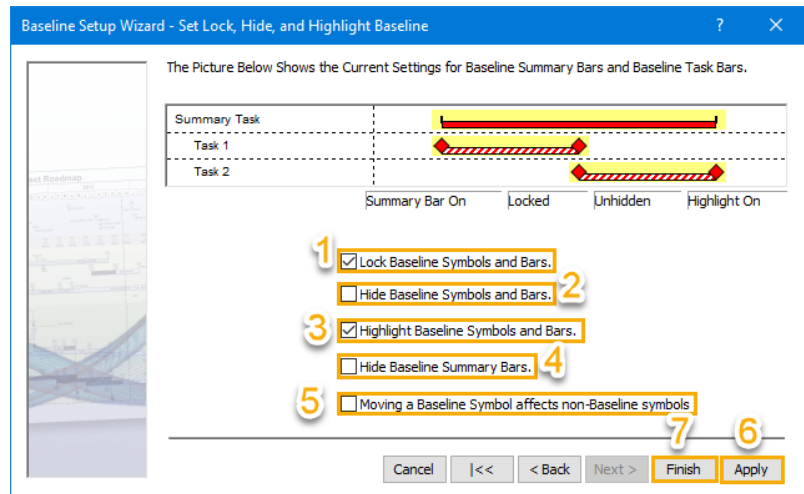
1. For **Summary Baseline Start** choose the **first black vertical line symbol** in the list.
2. For **Summary Baseline Horizontal Bar** choose the **first solid red bar** in the list.
3. For **Summary Baseline End** choose the **second black vertical line symbol** in the list.
4. Select **Next**. The **Baseline Setup Wizard - Select Summary Bar Symbols** window will display. Leave open and go to next set of instructions .



Choose Baseline options

In the **Baseline Setup Wizard - Set Lock, Hide and Highlight Baseline** window select the following:

1. Check on **Lock Baseline Symbols and Bars**. This prevents movement of the baseline on the Milestones schedule
2. Uncheck **Hide Baseline Symbols and Bars**. All Baseline will be contained in the schedule however if checked on all baseline will be hidden, if unchecked on all baseline will be shown.
3. Check on **Highlight Baseline Symbols and Bars**. If checked on baseline will be highlighted in yellow.
4. Uncheck **Hide Baseline Summary bars**. All Baseline will be contained in the schedule however if checked on baseline summary will not show and lower level baseline will show.



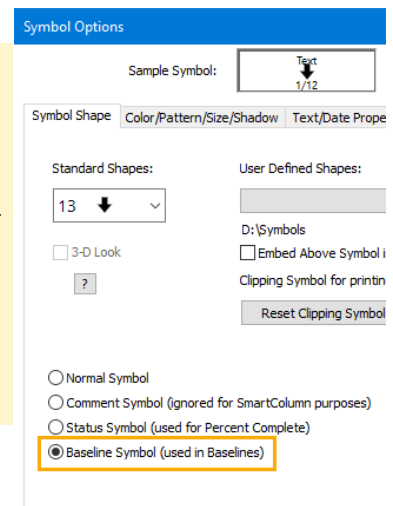
5. Uncheck **Moving a Baseline Symbol affects non-Baseline symbols**. Movement of a baseline symbol can affect all subsequent symbols on a task row or connected symbols. When this option is selected and Dependency Mode is turned on. You will be prompted to accept the movement of the other symbols.
6. Select **Apply**.
7. Select **Finish**. You will not see any change to the schedule yet.

More about Baseline Symbols

Once a symbol has been set as a baseline symbol in the wizard it remains a baseline symbol on the schedule. To return the symbol to a normal symbol double click the symbol in the toolbox. This displays the **Symbol Options** dialog box. Here, change its property back to **Normal Symbol**.

Several symbols can be set to be baseline symbols so that multiple baselines can be shown. To set-up multiple baseline symbols double click any symbol in the toolbox and change its property to **Baseline Symbol**. Continue this process until you have the number of baseline symbols necessary for your schedule.

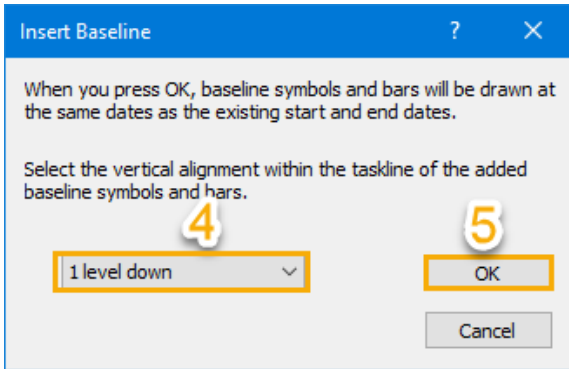
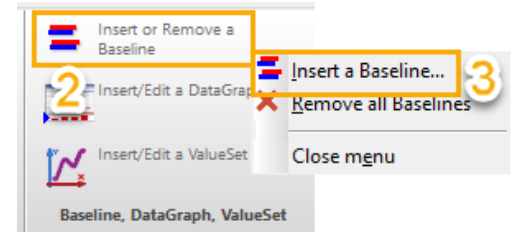
If the **Lock Baseline** feature is checked on the **Baseline Symbol** option in the toolbox will be greyed out. To unlock baseline choose the **View** tab in the **Baseline** section uncheck on **Lock Baseline**.



Insert baseline

Now that Baseline has been set-up using the wizard (Part 1 of this tutorial), it can now be inserted. This segment of the lesson will add a baseline based on the current start and finish dates. When the baseline is added, it will use the symbols and bars set up in the wizard.

1. Chose the **Insert** tab.
2. In the **Baseline, Datagraph, ValueSet** section choose **Insert or Remove a Baseline**.
3. Choose **Insert a Baseline**. The insert baseline dialog box will appear.

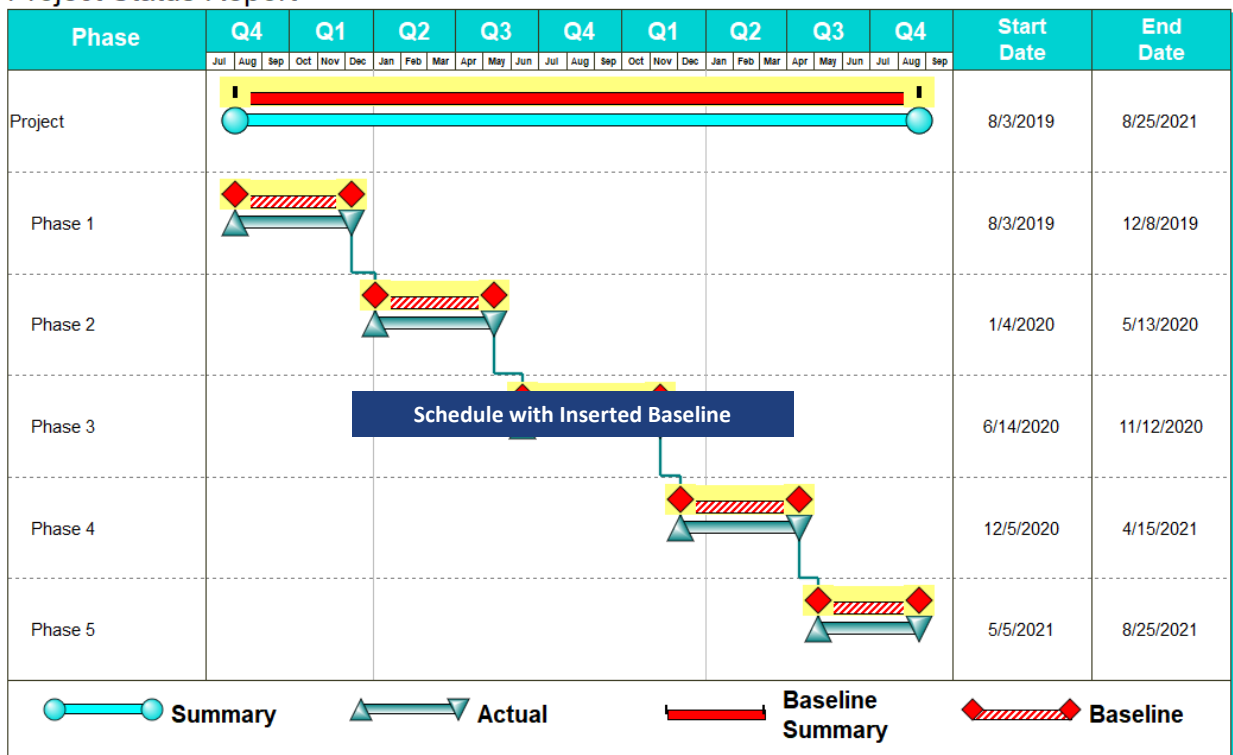


By default in the toolbox the actual and summary start symbol, horizontal bar, end symbol combinations' vertical placement is middle row so are the baseline and baseline summary start symbol, horizontal bar, end symbol combinations. By selecting one level down the symbols for baseline will be placed below the actual symbols. Symbol, horizontal bar, symbol combinations can be preset to a specific level by setting the symbols vertical symbol position in the toolbox.

4. Choose **1 level down**.
5. Choose **OK**. The schedule now has a baseline and the baseline is highlighted.

Baseline and Actual

Project Status Report



To re-baseline your schedule

1. Chose the **Edit** tab.
2. In the **Delete** section choose **All Baseline symbols**. The baseline will be deleted from your schedule.
3. Reset the actual start and end date of the schedule then follow the direction under **Part 2: Insert baseline** to have baseline draw based on the reset actual start and end dates.

Insert a Baseline Start Date column and a Baseline End Date column

1. Chose the **Insert** tab.
2. In the **Rows, Columns** section choose **New Column**.
3. In the drop down dialog choose **Dates**. The Insert Date Columns dialog box appears.
4. Check on **Baseline Start Date**.
5. Check on **Baseline End Date**.
6. Click OK. Schedule will have the new columns.

Insert Date Columns

Select the Date Columns you would like to use on your schedule. If you uncheck the box for an existing date column, it will be removed.

Normal Dates

Start Date. This column always shows the date of the first Normal symbol found on the task row. If no symbols are on the line then entering a date in this column creates a symbol.
If a start symbol is already on the line, then you can change its date by changing the date in the column.

End Date. This column always shows the date of the last Normal symbol found on the task row. If no symbols are on the line then entering a date in this column creates a symbol.
If an end symbol is already on the line, then you can change its date by changing the date in the column.

Status Date

Status Date. This column shows either the date of the first status symbol found or the computed Status Date based upon Percent Complete.

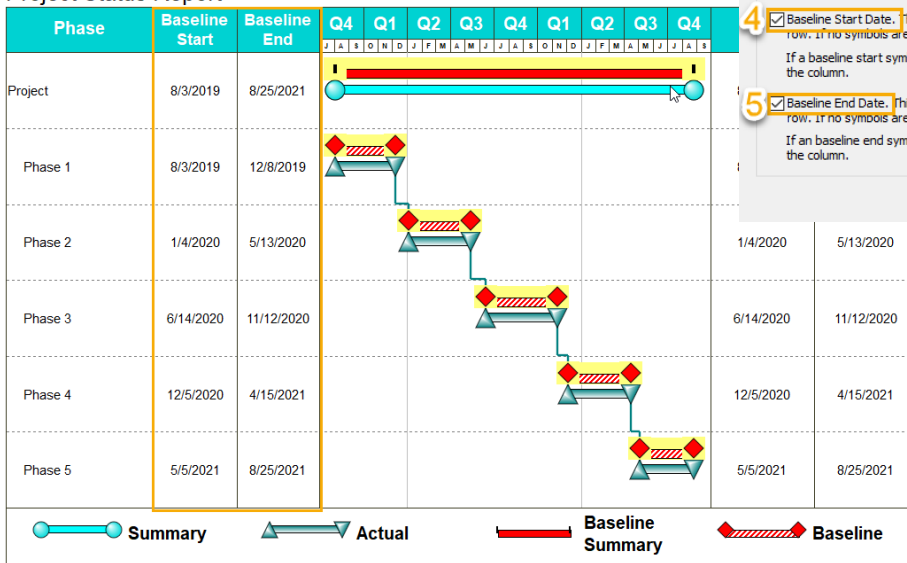
Baseline Dates

Baseline Start Date. This column always shows the date of the first Baseline symbol found on the task row. If no symbols are on the line then entering a date in this column creates a symbol.
If a baseline start symbol is already on the line, then you can change its date by changing the date in the column.

Baseline End Date. This column always shows the date of the last Baseline symbol found on the task row. If no symbols are on the line then entering a date in this column creates a symbol.
If an baseline end symbol is already on the line, then you can change its date by changing the date in the column.

Baseline and Actual

Project Status Report



Insert a Baseline Duration column

1. Chose the **Insert** tab.
2. In the **Rows, Columns** section choose **New Column**.
3. In the drop down dialog choose **Duration**. The **Insert Duration Columns** dialog box appears.
4. Check on **Baseline Duration**.
5. Click **OK**. The schedule now has a Baseline Duration column.

Insert Duration Columns

Select the Duration Columns you would like to use on your schedule. If you uncheck the box for an existing duration column, it will be removed.

Normal Dates

Duration. This column shows the working time between the start of the task and the end of the task. If the duration is entered in this column, the end date of the task is adjusted.
If a start symbol is already on the line, and then you enter a duration, an end symbol and bar is created automatically.

Used Duration. This column shows the amount of working time that has elapsed up to the Status Date.

Remaining Duration. This column shows the amount of working time left from the current Status Date to the scheduled End Date of the task.

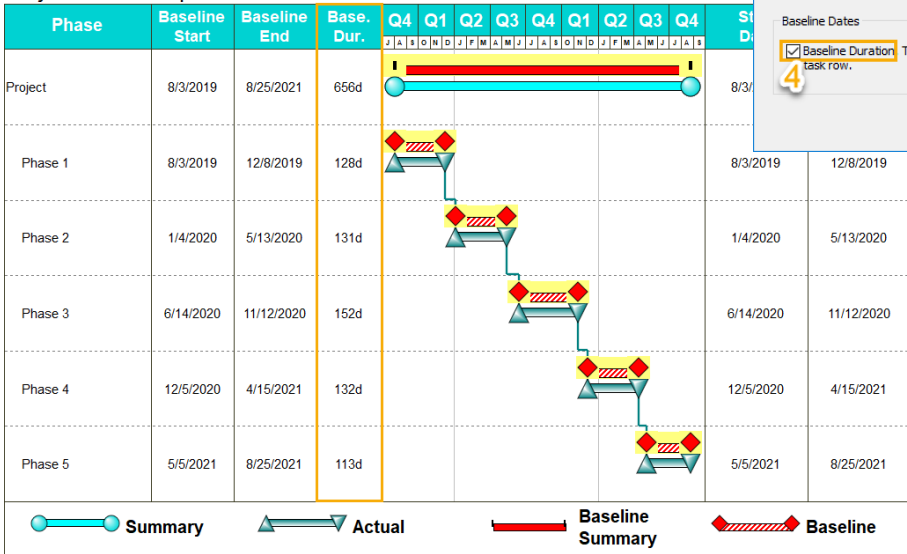
Time Ahead/Behind. This column shows the difference between the current Status Date of a task, and the current date of the schedule.

Baseline Dates

Baseline Duration This column shows the working time represented by the baseline symbols on a task row.

Baseline and Actual

Project Status Report

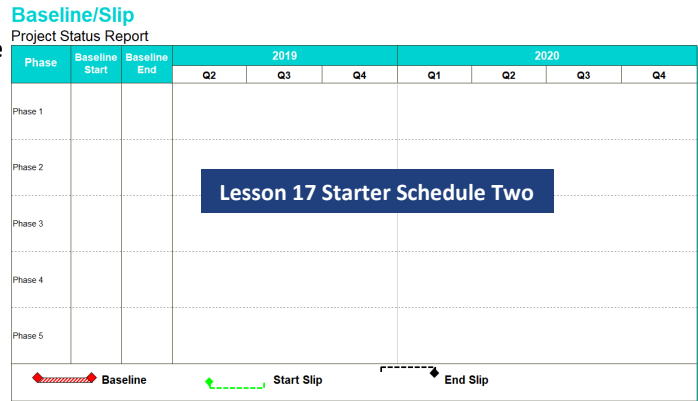


To change Duration settings choose the **Layout** tab. In the **Other** section choose **Duration Settings**.

Open schedule Lesson 17 Starter Schedule Two.mlh to use to complete lesson 17

This started schedule has the baseline symbol, horizontal bar, symbol combination and baseline start and end columns already set-up. The horizontal bars and symbols for showing a slips have also been set-up in the toolbox.

1. In the **Files and Templates: Open and Save Options** section select **Open Samples or Lessons**. The **Open a Sample Chart** dialog displays.
2. Under **Select a Folder below to Open**, go to the bottom of the list select **Lessons**. The Lesson schedules will display in the window to the right.
3. Select **Lesson 17 Starter Schedule Two.mlh**.
4. Save the schedule to an accessible folder on your computer. Choose the **File** tab. In the **Files and Templates: Open and Save Options** section, choose **Save As...** In the menu that displays choose **Chart**. Name, then save the schedule.

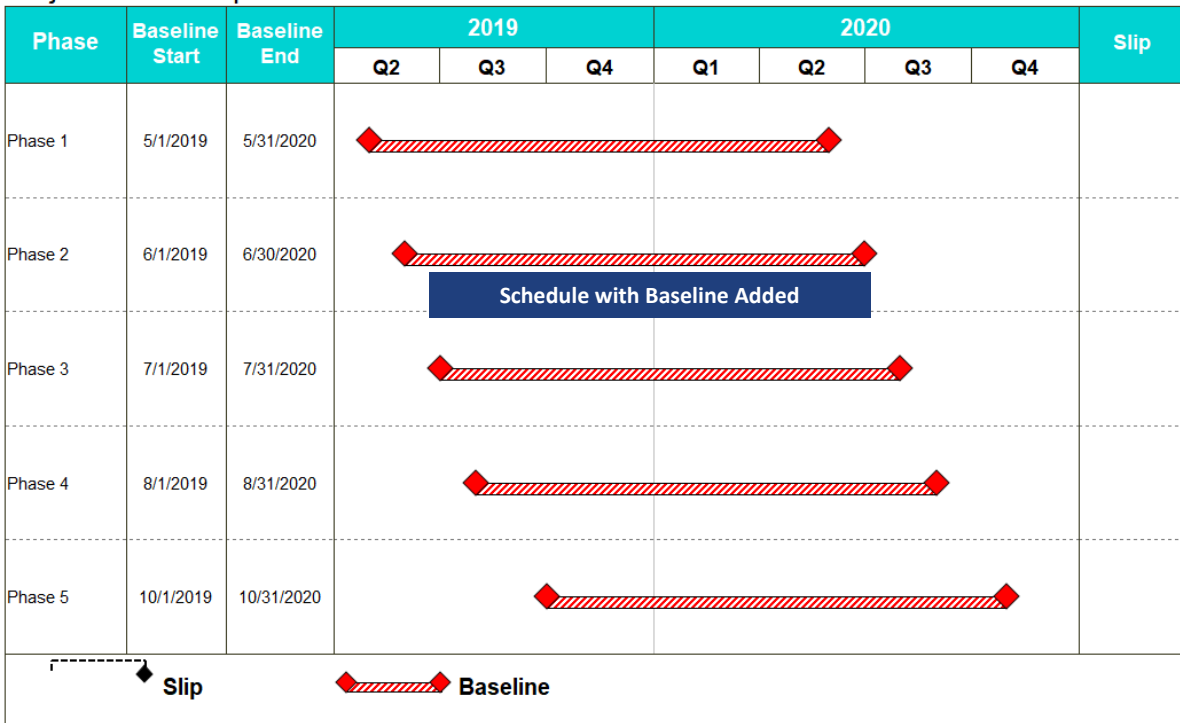


Add baseline to a blank schedule

1. Using the (T) **Text** tool in the toolbox, move your cursor over to the **Baseline Start** cell for **Phase 1**, type **5/1/2019**. A red diamond will now display in the schedule area.
2. Use the right keyboard arrow move to the **Baseline End** cell for **Phase 1**, type **5/31/2020**. A red striped horizontal bar with a red diamond end will attach to the existing red diamond.
3. Move your cursor over to the **Baseline Start** cell for **Phase 2**, type **6/1/2019**. A red diamond will now display in the schedule area.
4. Use the right keyboard arrow to move to the **Baseline End** cell for **Phase 2**, type **6/30/2020**. A red striped horizontal bar with a red diamond end will attach to the existing red diamond.
7. Enter the following information for the rest of the tasks.
Phase 3 - **Baseline Start 7/1/2019 Baseline End 7/31/2020**, Phase 4 - **Baseline Start 8/1/2019 Baseline End 8/31/2020**, Phase 5 - **Baseline Start 10/1/2019 Baseline End 10/31/2020**. After typing in Phase 5 Baseline end date do not press enter or the arrow key, click outside of the schedule to prevent Milestones rolling to the next page. Should this happen choose the **Edit** tab in the **Delete** section choose **Current page**.

Baseline/Slip

Project Status Report

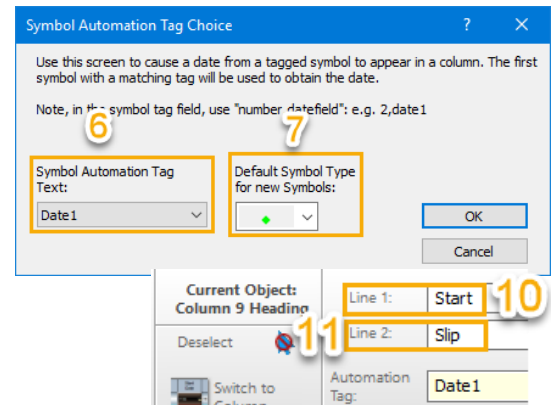


Add Symbol Automation Tag columns to show baseline start and end slip dates

When the baseline start and end dates cannot be met a slip occurs. To show that slip date in a column you can code the column and a symbol to have its date populate a column.

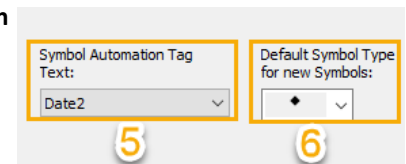
Insert a Date from Symbol Automation Tag column and code it to have the start slip date

1. Click the (↶) **Arrow** tool in the toolbox.
2. Select the **Baseline End column heading**, it will highlight. This will direct the inserted column to go to the left of the Baseline End column.
3. Choose the **Insert** tab.
4. In the **Rows, Column** section choose **New Column**.
5. From the drop down menu select **Date from Symbol Automation Tag**. The **Symbol Automation Tag Choice** dialog displays.
6. Under **Symbol Automation Tag Text** choose **Date1**.
7. Under **Default Symbol Type for new Symbols** choose the **lime diamond**.
8. Choose **OK** then **Ok** again. A column called **Date1** will be added. To increase the column's width, place the cursor on the border between added column and baseline end column, drag the border to the right.
9. To change the Date 1 heading, select the **Date 1 column heading** the toolbar changes to **Current Object Column Heading**.
10. In **Line 1**, back space through **Date1** then type in **Start**.
11. For **Line 2** type in **Slip**.



Insert a Date from Symbol Automation Tag column and code it to have the start slip date

1. Click the (↶) **Arrow** tool in the toolbox.
2. Choose the **Insert** tab. By default the inserted column will insert to the left of the schedule area.
3. In the **Rows, Column** section choose **New Column**.
4. From the menu select **Date from Symbol Automation Tag**. The **Symbol Automation Tag Choice** dialog displays.
5. Under **Symbol Automation Tag Text** choose **Date2**.
6. Under **Default Symbol Type for new Symbols** choose the **black diamond**.
7. Choose **OK** then **Ok** again.
8. To change the Date 2 heading, select the **Date 2 column heading** the toolbar changes to **Current Object Column Heading**.
9. In **Line 1**, back space through **Date2** then type in **Project Status Report**.
10. For **Line 2** type in **Slip**.



Phase	Baseline Start	Start Slip	Baseline End	End Slip	2019			2020		
					Q2	Q3	Q4	Q1	Q2	Q3
Phase 1	5/1/2019		5/31/2020		[Gantt bar with red hatched pattern and black diamond symbols]					
Phase 2	6/1/2019		6/30/2020		[Gantt bar with red hatched pattern and black diamond symbols]					
Phase 3	7/1/2019		7/31/2020		[Gantt bar with red hatched pattern and black diamond symbols]					
Phase 4	8/1/2019		8/31/2020		[Gantt bar with red hatched pattern and black diamond symbols]					
Phase 5	10/1/2019		10/31/2020		[Gantt bar with red hatched pattern and black diamond symbols]					

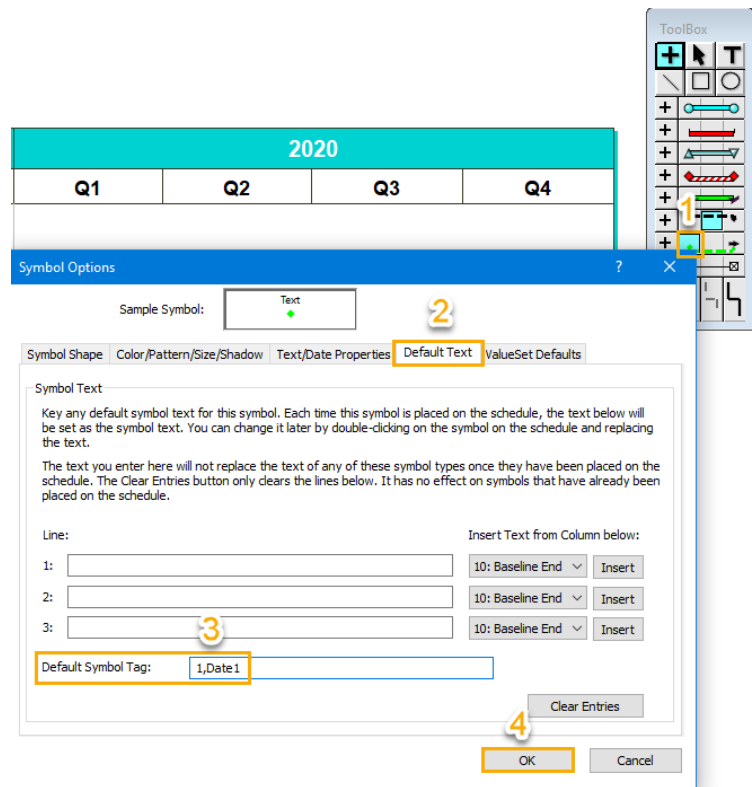
Legend: [Red hatched bar with black diamond] Baseline, [Green dashed line with black diamond] Start Slip, [Black dashed line with black diamond] End Slip

Add Symbol Automation Tag columns to show baseline start and end slip dates cont'd

Code the start slip symbol in the toolbox to populate start slip column

By coding the start slip symbol in the toolbox each time the symbol is added to the schedule its date will populate in the Start Slip column.

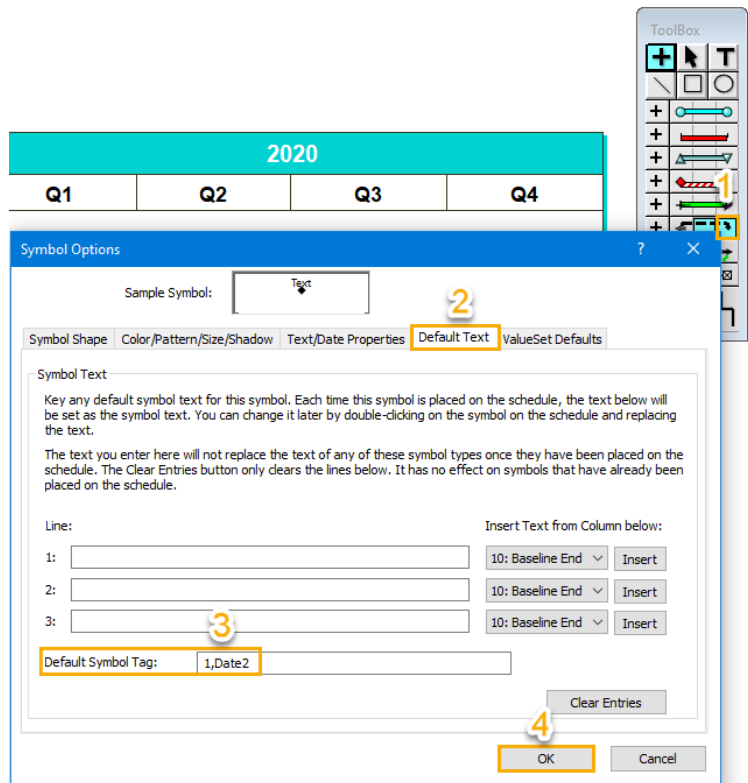
1. In the toolbox, Double click **the lime diamond** (symbol on the left in the 7th row of the toolbox). The **Symbol Options dialog** displays.
2. Select the **Default Text** tab.
3. For the Default Symbol Tag type in **1,Date1**.
4. Choose **OK**. Nothing will change on the schedule until you add the start slip symbol to the schedule later in the tutorial.



Code the end slip symbol in the toolbox to populate end slip column

By coding the start slip symbol in the toolbox each time the symbol is added to the schedule its date will populate in the Start Slip column.

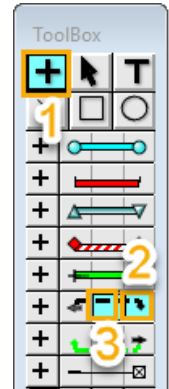
1. In the toolbox, Double click **the black diamond** (symbol on the right in the 6th row of the toolbox). The **Symbol Options dialog** displays.
2. Select the **Default Text** tab.
3. For the Default Symbol Tag type in **1,Date2**.
4. Choose **OK**. Nothing will change on the schedule until you add the end slip symbol to the schedule later in the tutorial.



Add slips

Add the end slip symbol

1. In the toolbox, click the (+) **Plus** tool.
2. In the toolbox, click the **black diamond** (the right symbol in the sixth row of the toolbox). It will highlight.
3. In the toolbox, click the **black dotted horizontal bar** (next to the black diamond). It will highlight.
4. Move the cursor to the schedule area and click on the **red diamond end symbol of Phase 1**.



5. Continue to hold the mouse button and drag horizontally to the right. Let go of the mouse button on **8/31/2020**. The slip is added and the end slip column for the task Phase 1 is populated with the slip date.
6. Move the cursor to the schedule area and click on the **red diamond end symbol of Phase 3**.
7. Continue to hold the mouse button and drag horizontally to the right. Let go of the mouse button on **9/30/2020**. The slip is added and the end slip column for the task Phase 3 is populated with the slip date.

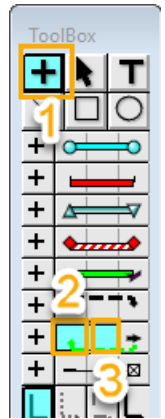
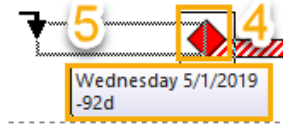
Baseline/Slip

Project Status Report

Phase	Baseline Start	Start Slip	Baseline End	End Slip	2019			2020							
					Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Phase 1	5/1/2019		5/31/2020	8/31/2020											
Phase 2	6/1/2019		7/1/2019												
Phase 3	7/1/2019		7/31/2020	9/30/2020											
Phase 4	8/1/2019		8/31/2020												
Phase 5	10/1/2019		10/31/2020												

Add the start slip symbol

1. In the toolbox, click the (+) **Plus** tool.
2. In the toolbox, click the **lime diamond** (the left symbol in the seventh row of the toolbox). It will highlight.
3. In the toolbox, click the **lime dotted horizontal bar** (next to the lime diamond). It will highlight.
4. Move the cursor to the schedule area and click on the **red diamond start symbol of Phase 4**.



5. Continue to hold the mouse button and drag horizontally to the left. Let go of the mouse button on **5/1/2019**. The slip is added and the start slip column for the task Phase 4 is populated with the slip date.
6. Move the cursor to the schedule area and click on the **red diamond start symbol of Phase 5**.
7. Continue to hold the mouse button and drag horizontally to the left. Let go of the mouse button on **8/1/2020**. The slip is added and the end slip column for the task Phase 5 is populated with the slip date.

Baseline/Slip

Project Status Report

Phase	Baseline Start	Start Slip	Baseline End	End Slip	2019			2020			
					Q2	Q3	Q4	Q1	Q2	Q3	Q4
Phase 1	5/1/2019		5/31/2020	8/31/2020							
Phase 2	6/1/2019		7/1/2020								
Phase 3	7/1/2019		7/31/2020	9/30/2020							
Phase 4	8/1/2019	5/1/2019	8/31/2020								
Phase 5	10/1/2019	8/1/2019	10/31/2020								